

CALIFORNIA TRANSPORTATION Journal

September–October 2002 Volume 3 Issue 2

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Strategic Mission and Goals

Two of the greatest challenges facing any organization are setting clear goals that help set the agenda, and then communicating those goals effectively. In a department of our size, with 23 000-plus people spread over every part of our state, those challenges are enormous and we are working hard to meet them.

Several years ago, we began surveying customers, stakeholders and employees about their notions about what our business was and how we conducted it. That process led to the development of a revised mission statement: "Caltrans improves mobility across California."

This simple statement sends a powerful message, reflecting our growing and changing responsibilities as the operator of a more balanced transportation system. Fueled largely by Governor Gray Davis' landmark Traffic Congestion Relief Program, we have the largest program in the history of the state, with \$7 billion of work underway. The historic nature of this effort is reinforced by our having grown the program by more than 60 percent in just three years.

Changing times bring new challenges, and we must find new ways to meet them. But the underlying strength of our organization remains the same: the commitment of our workforce to excellence. In this department there is a proud history of always seeking to be the best. These days, I see it everywhere: in offices, in our work on the system, in our publications. And better yet, when I talk with Caltrans folks, I hear a clear understanding of what we're in business to do.

The California Department of Transportation strives to be the highest-performing transportation agency in the country. In pursuit of our mission, we continue to build a talented and diverse team and to strengthen ties with our partners.

Late last year, the senior management team worked to set goals that would help us achieve our mission, allowing virtually every employee, regardless of where they worked and what they did, to take ownership. The goals do not prescribe specific actions, but rather set a direction. They won't change from year to year. What will change are the action plans that we set to implement them.

Jeff Morales

Like the mission statement, the goals are simple and straightforward:

- Safety: achieve the best safety record in the nation
- Reliability: reduce traveler delays due to roadwork and incidents
- Performance: deliver record levels of transportation system improvements
- Flexibility: make transit a more practical travel option
- Productivity: improve the efficiency of the transportation system
- Values: integrity, partnership, customer-focus, communication, empowerment, commitment, teamwork, innovation, stewardship

It now remains for each manager to work out an agreement that commits him or her to actions that support these goals. This will start the alignment of our work activities with the goals. Ultimately, this alignment should spread to every employee in the organization.

Jeff Morales



CALIFORNIA TRANSPORTATION Journal

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what a year!

Last year, the California Department of Transportation had the most successful year in its history. It had an unprecedented \$7 billion in projects under construction, and completed 550 projects worth more than \$1.5 billion. Caltrans performed construction on one in five kilometers of its highways.

This massive effort was highlighted in June by the California Transportation Commission's approval of funding for improvements to the Green River Road interchange on Highway 91 in Riverside County.

In June 2000, Governor Gray Davis unveiled the \$5.3 billion Traffic Congestion Relief Program to direct state general fund dollars to augment the \$12 billion in the State Transportation Improvement Program and the State Highway Operation and Protection Program. The governor gave Caltrans a two-year window to get the work started on all 141 projects.

With the Green River Road project, the department met that goal.

The Local Assistance Program staff worked with FHWA and 210 local agencies last year to achieve project approvals on 324 projects worth \$1.3 billion.

Even as it achieved these major milestones, Caltrans was changing the way it was doing business. The Division of Design has overseen the integration of context-sensitive solutions into its project development guidance, resulting in stronger partnerships within the department and with resource agencies. This is an effort that will speed approvals and make Caltrans projects more compatible with their surroundings.

The department was especially cognizant of the "people side" of what it does. The Caltrans Civil Rights Program was the first in the nation to gain federal approval and implement a unified certification program as provided by federal law, significantly reducing burdens on small businesses seeking to participate in Caltrans business.

The Division of Engineering Services awarded 535 contracts this fiscal year—totaling more than \$3.1 billion—which included the San Francisco-Oakland Bay Bridge skyway at \$1 billion, the largest single contract amount in the department's history. It also successfully piloted eBid, for electronic bidding of construction projects. iBid, a Caltrans follow-up effort to put a full-scale electronic bidding system into production, will be operational in 2004–2005.

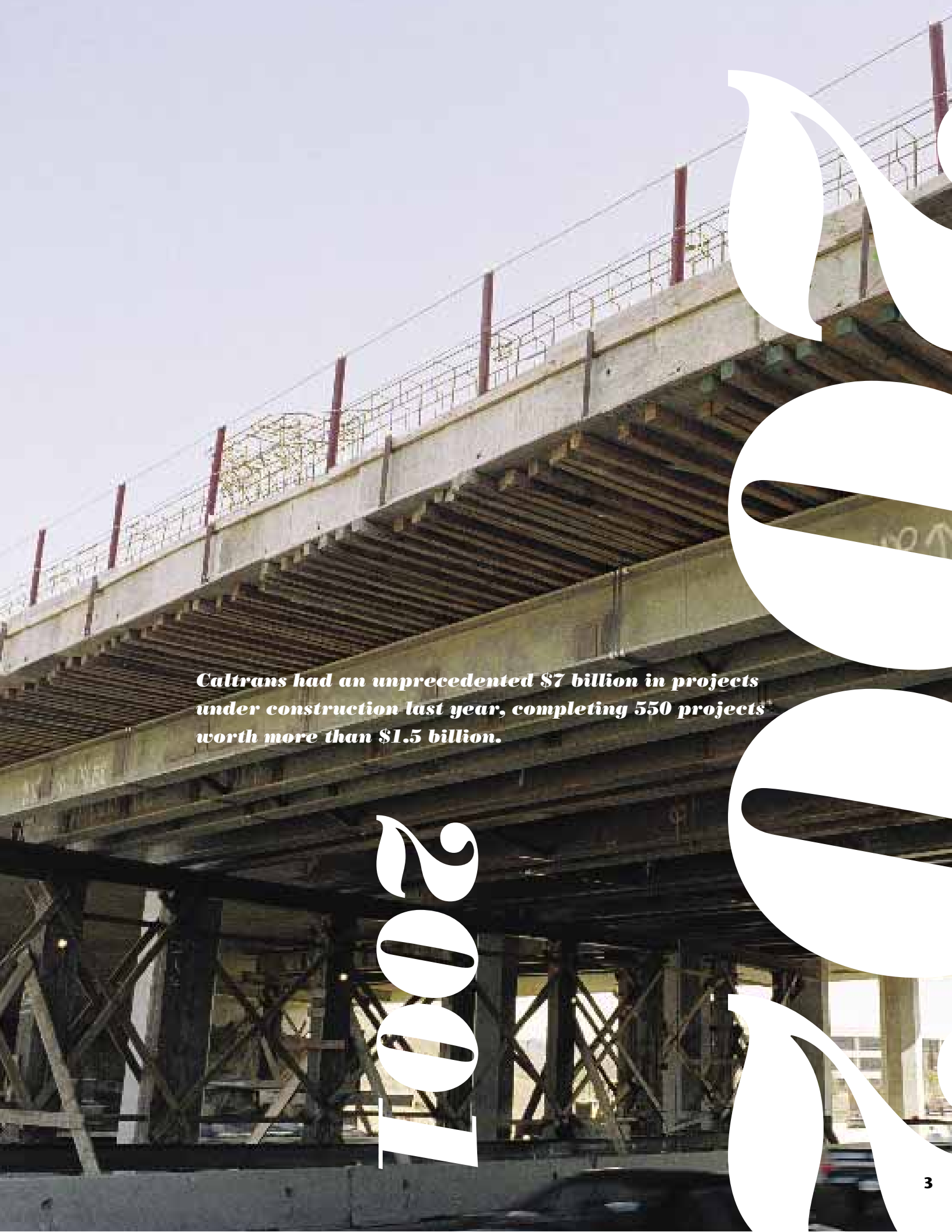
The Division of Environmental Analysis and the Federal Highway Administration, working jointly, have developed and implemented administrative efficiencies that will expedite project approvals.

Right of Way Division staff acquired 980 parcels, expended \$159 million in capital and managed 4943 properties, realizing more than \$13 million in revenues. Sales of 400 excess land parcels generated \$15.5 million. In addition, revenues of approximately \$20 million were generated from 550 leased airspace and wireless communication sites.

The Division of Traffic Operations assisted in the award of 127 safety projects totaling \$125.5 million, and successfully achieved toll-free operation of the Coronado Bridge in San Diego. It awarded a contract to Bentley Transportation and Applied GeoDynamics early in 2002, to implement an electronic permitting system, a matter of high legislative and public interest. The contract is slated for completion in mid-2003.

continued





Caltrans had an unprecedented \$7 billion in projects under construction last year, completing 550 projects worth more than \$1.5 billion.

2002



Caltrans “green” vehicles are contributing to a cleaner atmosphere for California.

Improvements spearheaded by the Division of Rail have boosted rail ridership in California to more than 3.5 million riders. Improvements include the addition of a second round trip on the San Joaquin route between Sacramento and Bakersfield, with a new stop at the recently rehabilitated Lodi Station. The division also oversaw the opening of a new station in Martinez and a new platform in Richmond with a dedicated entrance to the San Francisco Bay Area Rapid Transit station.

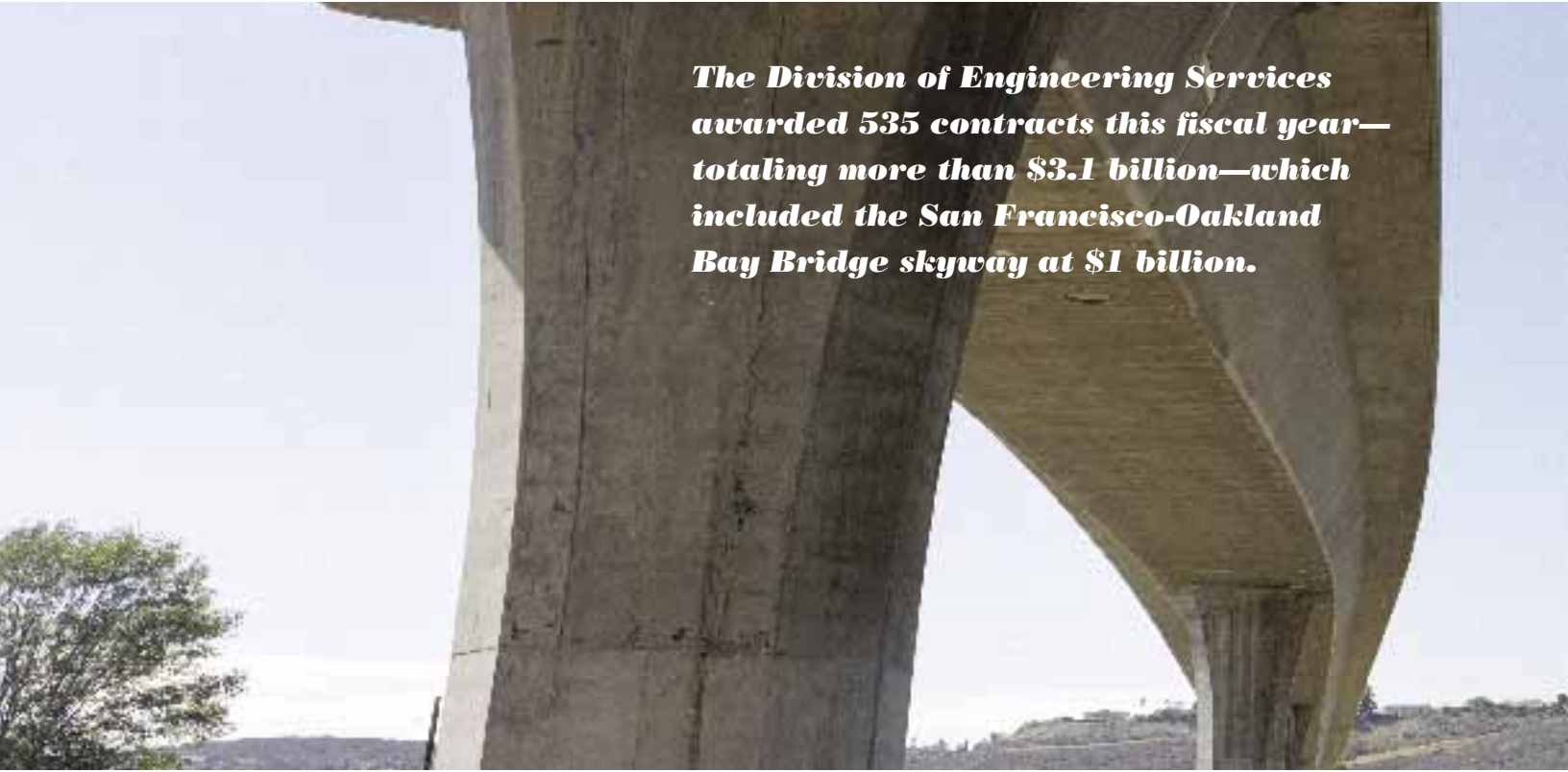
The Division of Mass Transportation is overseeing distribution of \$2.6 billion as part of the governor’s Traffic Congestion Relief Program for projects that include a bus rapid transit project in Santa Clara County, purchase of low-emission buses, expanded commuter rail service and new trains and track improvements throughout the state.

Division of Aeronautics staff performed nearly 1000 safety actions, including evaluating proposed school sites, conducting safety inspections and providing helicopter landing authorizations at schools. Further, in the fiscal year, the division awarded \$8.4 million of grants and loans to airports.

The Division of Maintenance awarded more than 100 contracts worth over \$80 million last year, with \$35 million dedicated to preventive maintenance to complete 1150 km of work.

Pavement rehabilitation and maintenance reduced the total number of kilometers of distressed roadways from 19 785 to 16 610—the lowest since the 1980s. By June, pavement rehabilitation projects totaling \$190 million had been awarded to repair 1785 km of distressed pavement. The Division of Maintenance has planned and approved contract awards in excess of \$79 million to improve pavement quality for more than 5670 km of travel way.

From July 2002 through June 2006, Caltrans will perform repairs on more than 25 000 km of highway



The Division of Engineering Services awarded 535 contracts this fiscal year—totaling more than \$3.1 billion—which included the San Francisco-Oakland Bay Bridge skyway at \$1 billion.

lanes—33 percent of the state highway network—with a record investment of more than \$3 billion.

The Division of Equipment continues to move the Caltrans fleet beyond current regulations. “Green” vehicles will continue to be identified with a reflective green “Clean Air” decal. This year the department has increased ultra-low sulfur diesel fuel usage to over a million gallons.

The Division of New Technology and Research successfully field-tested the automated cone machine to place and retrieve traffic cones, reducing exposure of highway workers to high-speed traffic and repetitive stress injuries. The division showed that high-volume pours of high-strength concrete can be placed more effectively by using cooling tubes to prevent overheating during curing. Caltrans used this timesaving technology for the foundations of the new San Francisco-Oakland Bay Bridge.

The Division of Information Technology completed installation of electronic toll collection equipment in all lanes

of all Bay Area toll bridges in October 2001, and received the National Computerworld Honors Program Laureate Award in March 2002 for the integrated maintenance management system.

The Legal Division resolved 350 tort cases, in which the state was sued for about \$1.1 billion. The division won 210 of these outright with no payment, as juries reached favorable verdicts or judges granted motions for summary judgment and/or dismissals.

On the administrative side, the Division of Accounting has continued to improve business practices and stepped up efforts to provide training and resources to other departmental staff. The Division of Audits and Investigations completed more than 500 assignments, including audits of \$22 million in construction claims; this resulted in \$14 million in audit exceptions that were disallowed.

Ridership of California's rail systems continues to climb with the addition of new services and rehabilitation of rail stations.

Pavement rehabilitation and maintenance reduced the km of distressed roadway in the fiscal year to the lowest level since the 1980s.



New Fiscal Year, New Challenges

The California Department of Transportation, recognized as a world leader in engineering, will expend \$8.9 billion in the coming fiscal year to build, operate and maintain one of the most effective and efficient transportation systems in the world. The system includes more than 24 000 km of highways and freeways that provide mobility and access to people, information and goods across California.

Caltrans also provides rail services under contract with Amtrak, provides services to more than 600 airports and heliports and partners with local agencies on projects.

Fund	Amount (in millions)	%
State Highway Account	\$3298	37
Federal Trust Funds	3577	39
Traffic Congestion Funds	821	9
Toll Bridge Seismic Bond Act	418	5
Public Trans. Account	153	2
Seismic Retro. Bond Act	62	1
Other Funds	262	3
Reimbursements	344	4
Total Funds	\$8935	

A 14% increase of the current year budget for the Department of Transportation shows California’s commitment to improving the transportation system, despite a budget shortfall. This is an increase of \$1.1 billion, compared to the previous fiscal year. Proposed staffing of 23 231 is 1 percent below the staffing in the previous fiscal year.

The department will spend this year’s budget as follows:

- \$3.7 billion for Capital Outlay, an increase of \$1.4 billion.
- \$2.2 billion for Local Assistance.
- \$3.0 billion for State Operations.

Major Fund Contributors

The \$3.3 billion State Highway Account and the \$3.6 billion Federal Trust Fund, the two major contributors for the department’s funding, are likely to enjoy an increase of 10 to 20 percent for this fiscal year. An important component of the funding is the Traffic Congestion

Relief Fund, created by the administration and legislature in 2000. This fund is likely to increase by 68 percent.

Major Programs

The department’s objectives are identified under six primary programs:

Aeronautics

The \$11.2 million Aeronautics program supports the California aviation industry—among the busiest in the nation—by alleviating problems such as incompatible land uses, potential safety hazards, aircraft noise and airport terminal congestion. The program:

- Ensures that airports and heliports comply with safety regulations.
- Provides financial assistance to local governments.
- Provides guidance to local governments about airport land use.
- Administers airport noise standards and regulations.
- Prepares the California Aviation System Plan.

Highway Transportation

The \$7.5 billion Highway Transportation Program focuses on constructing new roads and highways and on efficient maintenance and operations of the state highway system. This budget commits major resources to congestion relief in urban areas, improving the rural interregional road system and safety improvements. The program provides for administration, legal support, tort funding and related legal costs; financial assistance to cities and counties; management of traffic through surveillance, analysis and control and toll bridge operations and use of theoretical and applied research, testing and evaluation and demonstration projects.

The budget contains an adjustment to reflect a \$24 million federal reimbursement for terrorism-related costs in 2001–2002, and increases for 2002–2003 that include:

- \$172 million in federal TEA-21 Act grants.
- \$23.4 million and 167.5 personnel years to comply with the federal Clean Water Act.

- \$5 million for a new freeway service patrol grant program, in addition to an increase of \$100 000 for data collection and ongoing evaluation of the program.
- \$3.3 million to fund the move of District 11 office staff into interim space during the construction of its new office building.
- \$345 000 for the newly opened traffic management center in Orange County.
- \$2.2 million for one-time funding of \$1.7 million for mural restoration and two-year funding of a half million dollars for the California Conservation Corps' urban youth training program.

Mass Transportation

The \$848 million Mass Transportation Program supports efforts to bring about seamless, multimodal transportation in California by providing administration of state and federal capital and operations grants, planning and coordination for mass transportation and financing and oversight of intercity rail service, including capital projects.

Program activities enhance mobility in congested corridors by improving urban commuter rail service, expanding intercity passenger service and related facilities and meeting the needs of elderly and disadvantaged persons with low mobility.

Transportation Planning

The \$189 million Transportation Planning Program prepares the long-range state transportation plan as input to the State Transportation Improvement Program, regional improvement plans and departmental policies and programs. Its staff prepares the Interregional Transportation Strategic Plan and makes recommendations regarding issues and improvements, management of activities on multimodal plans, air quality, goods movement, livable communities, corridor preservations, traffic forecasts, emission modeling and energy conservation. They also evaluate impacts of local development projects on the state system.

Administration

The \$325 million Administration Program provides required budgeting, accounting, auditing, personnel, administrative, office facility and computer services to support other programs. Major adjustments include funding over three years of about \$77.4 million to prepare an information technology integration plan and to begin work on information technology projects that support department-wide financial management, local project management, land management and construction contract payments.

Equipment Service Center

The \$155 million Equipment Service Center Program purchases new vehicles, prepares new equipment for operations, manages the fleet through rental to the department programs and other entities, repairs and maintains the fleet and disposes of used vehicles. The fleet consists of 14 160 units, ranging from sedans to heavy off-road equipment with a total value of more than \$241 million. The budget contains one-time funding of \$10 million to replace and retrofit selected vehicles to operate using cleaner burning fuels and a one-time increase of \$570 000 to pilot the use of litter removal vehicles.

The California State Highway System accommodated 52 percent of all trips last year although it represents only nine percent of the total roadway system.



Financial Report

Departments <i>numbers in thousands</i>		2000–2001 Expenditures	2001–2002 ¹ Expenditures	2002–2003 ² Allocations
Administration	Administrative Services	\$ 70 306	\$73 113	\$105 735
	Materials	40 811	25 942	17 660
	Policy & Administration ³	2105	1395	0
	Subtotal	113 272	100 450	105 735
Civil Rights	Civil Rights	5687	7618	8586
	Subtotal	5687	7618	8586
Audits & Investigations	Audits & Investigations	4412	4875	5681
	Subtotal	4412	4875	5681
External Affairs	External Affairs	6365	1866	7748
	Subtotal	6365	1866	7748
Finance	Accounting	28 978	49 290	30 492
	Budgets	4946	5580	5442
	Innovative Finance	2346	3066	2312
	ISOR	399	550	623
	Statewide Pro Rata	46 621	65 802	77 682
	Transportation Programming	3255	3349	3229
	Subtotal	86 545	127 637	119 780
Information Technology	Information System Service Center	74 665	68 644	78 417
	Subtotal	74 665	68 644	78 417
Legal Support	Legal Support	94 762	92 596	71 007
	Subtotal	94 762	92 596	71 007
Maintenance & Operations	Equipment Services	159 356	187 196	160 655
	Maintenance	66 138	82 343	115 158
	New Technology & Research	44 704	39 390	57 896
	Traffic Operations	58 733	49 263	39 554
	Subtotal	328 931	358 192	373 263
Planning	Aeronautics	2470	2345	2345
	Local Programs	0	6619	11 120
	Mass Transportation	6481	5821	4846
	Rail	84 311	90 086	95 485
	Transportation Planning	10 838	25 255	40 684
	Transportation System Information	6909	5394	4945
	Subtotal	111 009	135 520	159 425



Departments Cont. <i>numbers in thousands</i>		2000–2001 Expenditures	2001–2002 ¹ Expenditures	2002–2003 ² Allocations
Director's Office	Director's Office	\$ 1939	\$1357	\$1846
	Subtotal	1939	1357	1846
Project Development	Construction	11 515	10 686	9781
	Design	17 289	12 633	8636
	Engineering Services	266 386	279 003	245 820
	Environmental	61 566	67 172	78 241
	Project Management	5522	11 656	113 543
	Right of Way	5522	5374	5336
	Right of Way Service Center	19 249	19 788	17 782
	Subtotal	387 049	406 312	479 139
Districts	Eureka	43 155	43 026	40 154
	Redding	51 147	55 166	54 910
	Marysville	185 341	208 490	196 239
	Oakland	392 767	419 132	372 383
	San Luis Obispo	47 201	48 861	52 380
	Fresno	190 561	198 660	184 142
	Los Angeles	270 971	302 984	282 435
	San Bernardino	148 803	163 541	144 192
	Bishop	24 961	27 590	27 169
	Stockton	57 160	54 913	60 783
	San Diego	140 084	145 097	133 711
	Santa Ana	99 525	102 439	86 476
	Subtotal	1651 676	1769 899	1634 974
Department Grand Total		\$ 2866 262	\$3074 966	\$3063 261
Statewide Operations <i>numbers in thousands</i>		2000–2001 Expenditures	2001–2002 Expenditures	2002–2003 Allocations
	Materials	\$ 63 403	\$47 404	\$17 660
	ASC	60 480	25 084	6555
	Agency	0	0	940
	Comp Caltrans Financial Management Systems	0	0	3575
	Subtotal	123 882	72 488	28 730
Departmental Grand Total		\$ 2260 357	\$2466 692	\$2983 190

¹ Fiscal Year 01–02 expenditures are as of June 30, 2002, and do not include final Month 13/Year end closing. Expenditure data will need to be adjusted once the Division of Accounting has completed the year end closing process to reflect "Actual" expenditures.

² Fiscal Year 02–03 allocated amounts shown for some districts may be overstated or understated because the initial allocations for these districts have not yet been fully distributed and the Governor's Budget has not yet been signed.

³ Policy and Administration will be absorbed by Administration Services in Fiscal Year 02–03.

Programs <i>numbers in thousands</i>		2000–2001 Expenditures	2001–2002* Expenditures	2002–2003 ² Allocations
Administration	Administration	\$ 280 582	\$303 548	\$324 095
	Subtotal	280 582	303 548	324 095
Aeronautics	Aeronautics	2581	2545	3199
	Subtotal	2581	2545	3199
Equipment Service Center	Equipment Service Center	171 198	190 495	160 531
	Subtotal	171 198	190 495	160 531
Highway Transportation	Airspace and Outdoor Advertising	3464	3703	3435
	Capital Outlay Support	1051 826	1194 144	1239 365
	Encroachment Permits	20 492	22 830	21 768
	Legal	87 123	83 956	64 169
	Maintenance	803 420	819 139	813 515
	New Technology	27 707	26 174	31 138
	Operations	121 570	111 019	96 599
	Research	27 142	25 608	26 443
	Toll Operations	49 832	29 290	21 751
	Transportation Permits	4836	5158	4679
	Transportation Programming	3395	3282	3589
	Transportation Systems Information	13 692	14 510	15 256
	Subtotal	2242 801	2367 782	2374 131
Mass Transportation	Mass Transportation	7760	9471	9888
	Rail Transportation	83 101	90 398	95 578
	Subtotal	90 861	99 869	105 466
Transportation Planning	Transportation Planning	107 369	107 870	104 381
	Subtotal	107 369	107 870	104 381
Departmental Grand Total		\$ 2895 392	\$3072 109	\$3071 803
Project Delivery <i>numbers in thousands</i>		2000–2001 Expenditures	2001–2002 Expenditures	2002–2003 Allocations
	Highways	\$ 2 731 000	2 305 000	2 200 000
	Rail Transportation	165 862	295 512	78 683
	Aeronautics	6.6	4.8	5.4
	All Project Expenditures	\$ 2 896 862	2 600 512	2 278 863
Plans Ready for Construction	STIP	65	62	37
	SHOPP	183	144	135
	Rehab	128	103	95
	Operations	19	10	17
	Safety	36	31	23
	Retrofit Sound-Walls	26	25	20
	Toll, Seismic, Minor, Other	406	400	400
	Total	680	631	592
Projects Underway		1682	1648	1335
Payments to Contractors		1632 323 135	1634 335 951	1682 100 000

*Preliminary Data

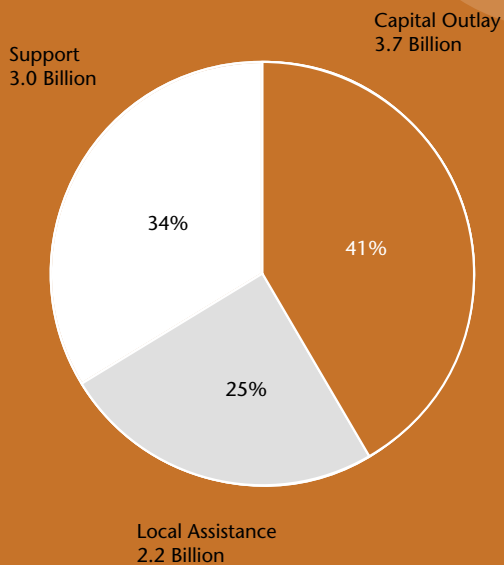
Performance Data

	1999	2000	2001
Annual Vehicle Miles (millions)	155 403	163 556	167 808
All Accidents	158 115	170 361	174 882
Accidents Where Fatalities Occurred	1371	1491	1544
Accidents Per Million Vehicle Miles	1.00	1.04	1.04
Fatal Accidents Per Hundred Million Miles	0.87	0.91	0.92

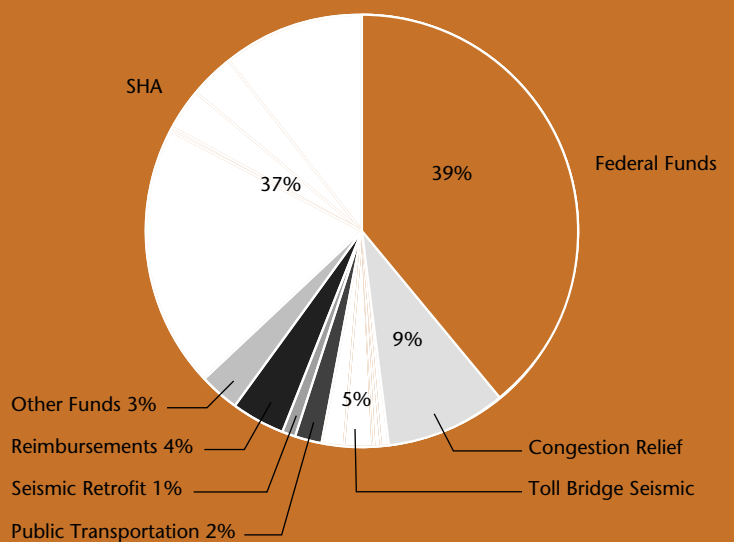
Maintenance Data

	2000–2001	2001–2002	2002–2003 (est.)
Crack Sealing (km)	8046	7250	7100
Pothole Repairs (tons of material)	28 392	18 133	16 471
Trash Pickup (m ³)	136 856	88 805	110 000
Spill Cleanup (number)	32 000	12 244	17 000
Debris/Carcass Removal (nbr)	297 000	154 103	230 000
Guardrail Repair/Replacement (m)	122 529	87 398	100 000
Median Barrier Repair (m)	42 367	64 642	47 000
Fence Repair/Replacement (m)	464 820	302 137	335 000
Weed Control (ha)	2050 000	45 665	50 000
Drains Cleared	197 662	96 975	175 000
Sweeping (km)	400 715	364 867	400 000
Pavement Striping (km)	156 102	99 210	86 000
Pavement Markings (m ²)	219 552	212 205	210 000
Storm Patrol (km driven)	3200 000	2653 496	1400 000

2001–2002 Budget Distribution



2001–2002 Source of Funds



Innovative Financing

By the year 2000—after years of work following the 1989 Loma Prieta earthquake, which shattered northern California and sent Caltrans on a mammoth effort to inspect and strengthen thousands of structures statewide—plans to construct the new eastern span of the San Francisco-Oakland Bay Bridge were complete.

The scope of work for the Bay Bridge had proven to be one of the most complicated of any on the structures needing seismic retrofit. Studies of several alternatives, done in coordination with the Bay Area Toll Authority, had determined that the best strategy for the east span was to replace it. Caltrans had identified a suitable alignment and proposed distinctive architecture. Engineering studies had been conducted and the construction plans were ready.

But to advertise and award the Bay Bridge contract, something else was needed: Caltrans and its partners had to figure out how to pay for it. In a report submitted to the legislature in April of 2001, the estimate for the work

state highway account, Proposition 192, the public transportation account and a \$1 toll surcharge on the seven Bay Area bridges. But the shortfall remained.

To develop a plan, Caltrans called upon its Division of Innovative Finance, which had been set up to look for new ways to generate financing to advance projects and, ultimately, deliver them earlier than planned. “We supplement the usual federal and state funding by looking for sources of financing from the private sector and unconventional public funds,” Division Chief Mark Hariri says.

When Hariri and his team went to work on finding a solution to the problem of the Bay Bridge shortfall, they found that a Transportation Infrastructure Finance and Innovation Act (TIFIA) loan would help to fill the project’s funding gap. A TIFIA loan is a federal credit program and therefore does not exhaust limited state or federal financial resources or the remaining toll bridge bonding capacity.

The plan includes \$450 million in credit assistance from TIFIA in the form of a direct loan. In addition to the TIFIA loan, funding will be derived from an \$850 million revenue bond issued by the state. During construction, the toll bridge program will use commercial paper (short-term bonds that mature in 270 days and are cheaper than a regular bond) to manage cash flow and minimize the amount of debt service.

Caltrans will provide long-term financing for the project, retiring the commercial paper by using tax-exempt toll revenue bonds. The \$1 seismic toll surcharge at each of the seven bridges in the system, generating an estimated \$120 million in yearly revenues, will provide the primary security for both the TIFIA loan and the tax-exempt debt.

“The Bay Bridge enjoys a strong market position because it is a part of the interstate highway system with a growing traffic base,” Hariri says. “The department can assure

“Innovative financing serves the public. It helps us deal with cycles in the economy.”

— Jim Nicholas,
Caltrans Division of Programming Chief



on the Bay Bridge alone was listed at \$3.3 billion. The funding plan, in place for years, was inadequate by an estimated \$1.32 billion.

Caltrans—together with the California Transportation Commission, the Bay Area’s Metropolitan Transportation Commission and the legislature—mounted an effort to identify a source of funds. These would come from the

Preparatory work for the majestic new east span of the San Francisco Oakland Bay Bridge is largely completed and work is expected to start shortly.

billion

its credit-worthiness through the solid history of the toll revenue stream for the repayment of the proposed TIFIA loan and the toll revenue bonds. Revenues produced by the toll surcharge have grown steadily over the years and have not suffered appreciably, even during short-term interruptions.”

Caltrans and its partner agencies have used innovative financing for Route 91 high-occupancy lanes in Orange County and Route 125 in San Diego County. In those cases, private interests have financed the projects with an expectation that eventual toll revenues would finance the cost of construction.

Caltrans and the San Diego Association of Governments are planning to finance the Interstate 15 managed lanes

by using Grant Anticipation Revenue Vehicle (GARVEE) bonds, which allow the acceleration of construction through bonding. Debt service, including costs, is from county or interregional share allocations of the State Transportation Improvement Program. Projects must be eligible for STIP funding, have environmental clearance and complete design and meet applicable federal requirements. Funding is limited to right of way and construction costs.

The 32 km Alameda Corridor rail-freight project is another example. Its funding included \$394 million from the ports of Los Angeles and Long Beach, \$347 million from Los Angeles County Metropolitan Transportation Authority and \$130 million in direct state and federal grants. The largest portion, \$1.16 billion, came from revenue bonds

continued

guaranteed by the Alameda Corridor Transportation Authority. The federal government loaned the project \$400 million for construction of street and highway overpasses. A fee on each container moved through the corridor will pay for federal loans and bonds to cover 65 percent of the total cost.

This complex funding package has made it possible for containers that otherwise would clog southern California's challenged freeway system to move through "The Trench," and demonstrates how effectively the strategies can be used to relieve congestion and improve mobility.

Recognizing the complexity and magnitude of these projects, and especially those under the toll bridge program, Hariri is quick to point out that partnering is a key component of the process. "Implementing a financing plan under any of these programs is a team effort involving staff from a variety of areas," Hariri says. "We also are assisted by state control agencies and local entities."

"The estimated benefits should be around three times the cost of financing for a project to be approved for the program. The Division of Innovative Finance does the analysis for us."

Transportation authorities throughout the state are also looking into innovative financing.

Chuck Oldham, Deputy Director for Policy and Legislation for the California Transportation Commission, says, "The California Transportation Commission's mission is to turn the gas tax, sales tax and other available funds into real projects. By using innovative financing tools, we optimize the use of funds. We always have fewer dollars available than projects to build. Innovative financing allows smaller counties to deliver expensive projects by borrowing against STIP shares."

"Innovative financing serves the public. It helps us deal with cycles in the economy," says Jim Nicholas, Caltrans Division of Programming chief. "However, we shouldn't overuse the tool and end up with heavy debt service. We need to use common sense to find the best solution for each project—small or large. "

"We have adjusted programming before to comply with ambitious delivery goals," Nicholas adds. "In the past 20 years, California's regions put measures on the ballot that taxpayers approved with over two-thirds of the votes needed. These resulted in many successful projects. Projects on Route 41, 168 and 180 in Fresno provide a good example. The new tools, if used wisely, will provide exceptional service to the public."

Using these tools requires a high level of responsibility. "The commission considers projects on a case-by-case basis," Oldham says. "A project has to be environmentally cleared, completely designed and ready for construction prior to bond issuance, since a bond starts to incur finance charges as soon as it is issued. The estimated benefits should be around three times the cost of financing for a project to be approved for the program. The Division of Innovative Finance does the analysis for us."

"A project may appear marginal when considered separately," Nicholas says. "But taken in the context of the rest of the system, it will have utility. One example is the Route 15 project that we are delivering by using GARVEE bonds in partnership with San Diego Association of Governments. The benefits magnify when we consider that this project completes congestion relief efforts in the entire corridor."

"I'm a believer in partnership," Nicholas says. "Our local partners face a challenge in delivering the 2002 State Transportation Improvement Program. Caltrans and the commission both encourage the use of tools such as GARVEE by regional authorities to expedite projects. The regions will come up with a list of candidate projects and our Division of Innovative Financing will evaluate and make recommendations."—*Andre A. Schokrpur, Executive Development Program*

TCRP Turns Two

For millions of motorists fighting traffic congestion across the Golden State, relief is spelled C-a-l-t-r-a-n-s.

Thanks to a concerted effort of thousands of Caltrans personnel over the past two years, help is on the way to ease traffic congestion in some of the state's most heavily traveled corridors.

With approval of funding in June by the California Transportation Commission for improvements to Green River Road and State Route 91 in Riverside County, work has commenced on all 141 projects proposed in Governor Gray Davis' Traffic Congestion Relief Program.

Davis unveiled the \$5.3 billion program in June 2000 to direct state general fund dollars to augment the \$12 billion in the State Transportation Improvement Program and the State Highway Operation and Protection Program.

The program provides resources to ease congestion in some of California's most heavily traveled corridors, improve the movement of commerce and address the frustration travelers face with modes that do not connect.

Caltrans, given a two-year window to get the work started, reached its goal with adoption of \$5 million for the Green River Project.

"These projects represent some of the most critical, in terms of job creation, economic activity and quality of life," said Caltrans Director Jeff Morales. "I am proud of the efforts of countless Caltrans employees and our regional partners to keep these improvements moving forward."

Morales added that the program also afforded Caltrans an opportunity to showcase its new approach to challenges. "We have worked hard to zero in on the best solution for a particular situation. Too often in the past, it was a highway answer only. Under this plan, more than 55 percent of the funding has gone for non-highway solutions, including passenger rail and mass transit."

The two-year report card is impressive.

- Applications for funding have been approved for all 141 projects.
- \$3.6 billion of \$4.9 billion available for congestion relief projects has been approved.
- \$400 million has been provided to cities and counties for deferred maintenance.

When the governor's program was developed, each of the original 141 projects received a "years to break ground" schedule, generally considered the time required to start construction. To date, schedule information is available on 126 projects:

- 33 (26 percent) are ahead of schedule.
- 65 (52 percent) are essentially on schedule.
- 28 (22 percent) have anticipated delivery beyond the "years to break ground" schedule.

By December 31, 2002, nearly \$3.3 billion in traffic congestion relief funds will be at work in the following categories:

- Environmental Planning/Studies: \$250 million
- Project Development: \$1.28 billion
- Construction/Procurement: \$1.75 billion



Funding to ease the bottleneck at Green River Road and State Route 91 marks the successful start of implementation of all of the projects in the Governor's Traffic Congestion Relief Program.

Major Project Accomplishments

Ribbon-Cutting or In Service

- San Diego County: New locomotive for Coaster commuter rail service
- Mendocino County, North Coast Railroad Authority: Re-open rail line from Lombard to Willits

Groundbreaking and Initiation of Construction Activities

- Contra Costa County: Widen and add high-occupancy vehicle (HOV) lanes on State Route 4 between Railroad Avenue and Loveridge Road in Pittsburgh
- Fresno County: Construct second main track from Calwa to Bowles/ San Joaquin intercity rail service
- Los Angeles County: Automated traffic signal coordination along Victory Boulevard corridor in Los Angeles



- Marin County: Add HOV lanes on U.S. 101 through San Rafael
- San Diego County: Reconstruct I-5/I-805 interchange and widen I-5 and I-805
- San Francisco County: Construct new San Francisco Muni light-rail line along Third Street to Bayshore intermodal station
- Santa Barbara County: "Smart corridor" on State Street in Santa Barbara
- Santa Clara County: Widen U.S. 101 and improve 101/Route 85 interchange south of San José
- Santa Clara County: Construct direct connectors on State Route 85/Route 87 interchange in San José

Construction Projects Advertised or Ready To Advertise

- Alameda County: Track and signal work between Oakland and San Jose to add Capital Corridor capacity, improve run-times and increase reliability
- Kings County: Construct San Joaquin intercity rail track and signal improvements near Hanford
- Kings County: Rehabilitate short-line track for freight service from Visalia to Huron
- Los Angeles County: Construct new Metrolink siding in Sun Valley
- Orange County: Grade separation for the Alameda Corridor East, and Burlington Northern and Santa Fe lines in Placentia

- San Bernardino County: Extend Metrolink siding and add signal improvements in San Bernardino line near Pomona
- San Diego County, State Route 56: Construct 8 km of six-lane freeway
- San Diego County: Construct new Otay Mesa freeway (Interstate 905)
- San Francisco County: Improvements at the BART Balboa Station in San Francisco
- San Joaquin County: Construct second main intercity rail track from Stockton to Escalon
- San Mateo County: Add third main Caltrain track, and make related track and signal improvement for new Baby Bullet express service
- Santa Clara County: Add second Caltrain main track between Tamien and Lick stations south of downtown San Jose

Request for Proposal or Contract Award for Procurements

- San Diego County: Acquire compressed-natural-gas buses and transit vans for North San Diego County Transit District
- San Francisco Bay Area: Procure suburban and over-the-road express buses
- Santa Barbara County: Acquire and install automated vehicle-location tracking system for Santa Barbara Metropolitan Transit District

CTC Approval of Projects for Consideration for Future Funding

- Kings County, Cross Valley rail corridor, mitigated negative declaration, December 2001
- Los Angeles County, HOV and auxiliary lanes on Route 405 in West Los Angeles from Waterford Avenue to Route 10, negative declaration
- San Diego County, San Diego Oceanside-Escondido rail, negative declaration, October 2001
- San Diego County, San Diego/Oceanside high-speed ferry, mitigated negative declaration, February 2002
- San Diego County, right of way acquisition for Interstate 5 managed lanes project, Rancho Bernardo, negative declaration, October 2001
- San Joaquin intercity rail corridor, Calwa to Bowles, mitigated negative declaration, December 2001
- San Mateo County, regional express bus on El Camino Real, negative declaration, October 2001

Other Significant Accomplishments

- Approval to allow the Santa Clara Valley Transportation Authority use of TCRP funding to acquire railroad corridor and make it available for the BART extension to downtown San Jose

—Jim Drago, Headquarters External Affairs

building FOR



CALTRANS' FUTURE

Caltrans prides itself on giving travelers the most modern and reliable transportation system in the world. While the department has made a concerted effort to take care of travelers, its employees have often had to labor in less than desirable facilities.

Almost three-quarters of the office space owned by Caltrans is more than four decades old. Even though the staff is not expected to grow over the coming five years, Caltrans workers are likely to need an additional 5663 m³ over the next five years.

The 2003–2008 five-year office building plan calls for an expenditure of almost \$180 million to correct structural deficiencies in Districts 2, 3, 4 and 5; modernize buildings in Districts 1, 9, 10, as well as headquarters and address space deficiencies in headquarters and Districts 6 and 12. New buildings have been built or are under construction in Districts 4, 7 and 8, and will soon be built in Districts 3 and 11.

"A large number of Caltrans office buildings, transportation management centers, equipment shops, materials laboratories and maintenance facilities are planned for

improvement," says Diane Mariana, Chief, Office of State-wide Facilities Planning and Operations, who has much of the responsibility for the effort. "Development of new buildings is driven by fire, life and safety needs; seismic risk; cost; code deficiencies; Americans with Disabilities requirements; energy and security problems; age and space issues. The Department of General Services, in partnership with Caltrans, manages the projects."

To address these needs, several "signature" office buildings are either under construction or in development. These include the impressive new \$190 million headquarters for Caltrans District 7 across the street from the old one (between 1st, 2nd, Main and Los Angeles Streets in downtown Los Angeles). That building, whose architectural and design details were selected through a competition among world-class architects, is expected to be up and operating by July 2004, with 66 516 m³ of office space and 1142 parking spaces to accommodate 1800 employees.

In San Diego, Caltrans will expend \$78 million on a new building, to be built across Taylor Street from the existing building and next to Interstate 8. The building, now

continued



Major new buildings have recently been built in Districts 4 and 8, and a signature building is under construction in District 7. The department will break ground on a new District 11 building this year and plans new buildings in several other locations.



in the working-drawing stage and expected to be complete by 2005, will house 900 staff. The building's design is reminiscent of mission

architectural style, to be compatible with San Diego's historic Old Town, which has been Caltrans' neighbor since the office was built in the 1950s.

The building is designed to resemble a campus around an open courtyard, rather than as a monolithic structure; none of the structures will be higher than five stories—another tip of the architect's hat to Old Town. And as with other new Caltrans buildings, the District 11 headquarters will be a "green" building, designed to minimize the use of energy. Its floor space will smooth the flow of work between functional units.

Funding for a new district office building in Marysville was requested in the 2002–2003 budget. The Department of General Services will advertise for bids on the new building, slated to be in close proximity to the existing one on B Street in Marysville. That building, another "green" building, is expected to house 700 employees with services that include a cafeteria and child-care center. Move-in is expected in 2006.

The 2002–2003 budget also contains a request for \$600 000 to complete Phase I of the headquarters consolidation master plan to assess space needs in Sacramento—a study that has been envisioned for the past 10 years. About 4500 staff work in 14 leased buildings around Sacramento. The initial concept would place a building between 10th and 11th and P and Q streets, an area now occupied by employee parking and the DOT day care center. About 1500 employees would move from leased space into a single state-owned building.

A facilities study would identify the total space required, parameters for development, functions to be assembled at that location and potential cost. The next step is to make a budget request to the Department of Finance and the legislature. After approval, construction could be completed in four years, utilizing a design-build delivery method similar to that used for the East End Project. The study will also assess the deficiencies of the headquarters building at 1120 N Street; any work done on that building must be performed carefully so as not to damage its historic character. The cost to rehabilitate and renovate the building will be included in the analysis.

Caltrans proposes to upgrade an average of one non-compliant equipment shop annually and to construct five new ones by 2011. These include relocating the headquarters equipment shop (potential sites include the former McClellan Air Force Base) at a cost of about \$18 million, and building or remodeling shops in virtually every district at an overall cost of \$33.8 million.

In 1997, Caltrans laid out a master plan for transportation management centers that provided for eight urban and four rural centers. This plan acknowledged that travel had become so heavy that it would be necessary to manage travel virtually everywhere in the state. New centers, almost all of them providing for the presence of the California Highway Patrol, have recently opened or been upgraded in every Caltrans district.

The background of the cover is a photograph of a multi-level highway interchange with a blue and white high-speed train in the foreground. A semi-transparent grid of green and yellow squares is overlaid on the image. The title 'California Transportation Plan' is in a black rounded rectangle on the left, and '2003' is in large white letters on the right.

California Transportation Plan

2003

Vision: California has a safe, sustainable transportation system that is environmentally sound, socially equitable and economically viable; it provides for the mobility and accessibility of people, goods, services and information through an integrated, multimodal network.

The California Transportation Plan contains an analysis of transportation trends, a set of goals, policies to guide decision makers and a recommendation for a plan of action.

The Transportation Enhancement Act for the 21st century requires that each state be guided by a periodically updated state transportation plan. For the past two years, Caltrans has been at work with regional transportation planning agencies to provide overarching strategies for the improvement of safety, mobility and accessibility and to guide government investments and private-sector decisions.

Caltrans began updating its plan in August of 2000, embarking first on a program to solicit comments and concerns from the public, other agencies and interest groups. Earlier this year, the department distributed a draft for review and comment in public hearings, meetings, interviews, electronic mail and the postal service.

The resulting 40-page policy-oriented plan contains an analysis of the trends likely to influence travel behavior over the next 20-plus years, a set of goals for meeting the challenges posed by those trends, policies to guide decision-makers in attaining the goals and a call for a plan to outline the actions required.

Trends

Trends in population and economic growth, demographics and travel behavior, safety, employment, housing, land use, technology, environmental and community values and funding will come to bear on how Californians travel tomorrow.

Already the most populous state in the nation, the state is likely to experience a population increase of 11 million, reaching 45 million residents during the first two decades of the 21st century. Much of that growth will occur in the Los Angeles basin, the Inland Empire and the San Francisco Bay Area.

California can expect to see a rapidly growing economy that is highly dependent on trucking, but with increasing air and rail cargo sectors; employment growth that is concentrated heavily in southern California and the San Francisco Bay Area; a jobs-housing mismatch that has already sent almost 10 percent of Californians commuting more than an hour each way; changing technology; a likely peaking of world petroleum production by mid-century; further regulations to protect the environment and more shared decision-making between agencies and communities.



Goals

The following goals were enumerated in response to discussions with other transportation providers, local and regional agencies, citizens and elected officials. While identified and discussed separately, they are interdependent and must provide effective mobility and accessibility to support the state's economic vitality.

Enhance Public Safety and Security:

All modes must address traveler safety. New technologies should be incorporated into the planning process when designing the system's infrastructure and then coordinated at state, regional and local levels to meet safety needs.

Preserve the System:

Preserving the state's extensive system includes maintaining roadways, rail beds, pedestrian walkways, bicycle paths, airports, seaports and transit facilities and vehicles.

Improve Mobility and Accessibility:

By 2020, California will be home to 45 million residents and 34 million vehicles. New facilities alone cannot meet the demand. The system must provide travel options, including connectivity between modes.

Maximize Efficient Use of Resources:

California's public and private sectors must protect air, water, land, plant and animal life and habitat and our cultural assets.

Reflect Community and Environmental Values:

Decision-makers must find solutions that balance and integrate community, aesthetic and environmental values with safety and performance.

They include ensuring the safety and security of system users, maintaining and rehabilitating the system, expanding the system and enhancing modal choices, protecting the environment, using resources efficiently and balancing system performance and safety with community, aesthetic and environmental values.

The trend that never seems to tip downward is increasing demand.

Transportation demand continues to grow, while state, local and federal funds fall short of what is needed to ensure mobility and facilitate movement of goods. According to the California Transportation Commission's "Inventory of 10-Year Funding Needs for California's Transportation System," released in May 1999, the total 10-year funding shortfall for all modes exceeds \$100 billion.

Transportation providers will need to develop new approaches for demand management and system opera-

tions—as well as funding—for maintaining and expanding the current system. Transportation providers will need to find new ways to negotiate, collaborate and share resources to reach common goals.

Planning for transportation works on an integrated system concept: policy and decision makers cannot view transportation by individual mode or geographic area, but must plan and operate it as an integrated system with complementary modes and connecting jurisdictions that appear seamless to users.

continued

Policies and Strategies

Through extensive discussions, the planning team also worked out a number of policies to guide the achievement of the overall goals.

Policy 1: Expand opportunities for collaboration in planning and decision-making. Although the department generally has been committed to involving individuals, agencies and institutions in transportation development, the complexities of today's world and the expectations of citizens will require even greater efforts to bring them into the process.

Policy 2: Maintain, manage and preserve a safe transportation system. Preserving the system and increasing safety is a primary concern of transportation providers and users. California's system includes more than 270 000 km of public roads. One-third of the system needs pavement work. More than half the bridges are more than 30 years old and, while safe, need rehabilitation. Sixty percent of county roads are in poor condition.

Transportation providers must use coordination and technology, as well as innovative techniques and materials, to minimize costs and traveler disruption, reduce motor vehicle, bicycle and pedestrian incidents and reduce the rate of fatalities, injuries and property damage.

Policy 3: Develop, manage and operate an efficient, interconnected and intermodal transportation system. Meeting the demand to move people, goods, services and information by the most efficient means will require improving system management and connectivity of systems, integrating services and technologies, cross-jurisdictional coordination and consideration of goods movement in project planning.

Policy 4: Accommodate growth and conserve resources. Addressing concerns about population growth and its challenges to quality of life will require planners to include land-use impacts, demand management, modal alternative analysis and incentives and disincentives to promote sustainable land-use decisions. The objective is smart growth, clean-up and re-use of contaminated lands and other measures.

Policy 5: Enhance system capacity and provide viable choices. Enhanced capacity and choices will result from improving and expanding infrastructure reliability and connectivity and interconnecting transit with other modes.

Policy 6: Provide additional and more flexible financing. Funding shortfalls challenge the ability of providers to produce capital projects, operations and maintenance. Good management, along with stable and flexible revenue streams, are needed. Strategies include demand management, user-based mechanisms, increasing traditional financing and private investment, securing an increased share of federal funding, more flexible use of federal funds and other measures.

Policy 7: Support research to advance mobility and accessibility. Computer research and technology hold the key to improving the efficiency of the transportation system. Areas of research include geospatial, digital and other advanced imaging systems to evaluate environmental and social context, new materials for system life and performance, technologies to manage the system and other measures.

2003
GOALS/TRENDS
PLAN OF ACTION

CTP Vision/Goal	System Performance Measure	Indicator	Status
Enhance public safety and security	Safety and security	Accident rates Crime rates Security levels	Fully tested Included in some regional plans
Preserve the system	System preservation	Asset condition	Fully tested Included in some regional plans

Rural Issues

Transportation is crucial to the development of rural areas and communities. Pedestrian-oriented main streets in historic rural downtown areas have served as examples for improving urban environments. These should continue to reflect community values and character while enhancing the rural economy.

Safety is a concern in rural areas. Nationally, more than 58 percent of fatalities occur in rural areas. The fatality rate per 100 million vehicle miles traveled is more than twice that of urban areas. Rural entities are often challenged to provide transit and paratransit services to rural customers who are sparsely distributed over considerable distances.

Strategies to address rural issues include ensuring adequate funds for the rural and interregional system; providing safety improvements and efficiencies; flexibility of funds; considering interregional traffic; including goods movement, tourism and weather impacts when allocating resources; incorporating community values and context-sensitive solutions in rural projects and other measures.

Performance Measures

The Business, Transportation & Housing Agency has initiated efforts to develop measurable criteria to evaluate the performance of the system, gauge if and to what degree the vision and goals are being achieved and to support funding and operational decisions. This effort resulted in the 1998 "Transportation System Performance Measures Report," a blueprint for developing performance measures, desired outcomes and mode-neutral candidate measures or indicators. The relationship is illustrated above.

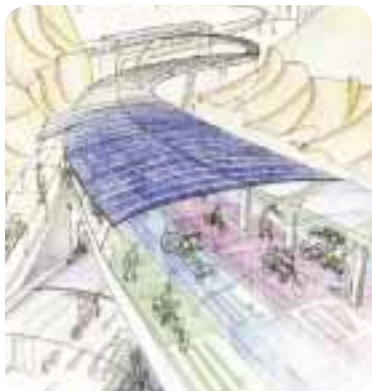
Plan of Action

After decision-makers approve the state transportation plan, Caltrans will develop measurable objectives, roles, responsibilities, timelines, estimated costs and targeted outcomes. The department will also develop a method to monitor progress toward the goals, a reporting system and a schedule.

Developing the plan of action will require coordination and collaboration with regional planning agencies, local and regional officials, other governmental entities, tribal governments, business, communities and system users.

Participants in this effort will vary, depending on the strategy being addressed. Working together, all will produce a plan that translates overall strategies into workable actions and, ultimately, into projects.

Performance measures will help to determine if the plan's goals are being met.



The Division of Transportation Planning popularized the development of the California Transportation Plan with an innovative school art contest.

Caltrans Districts

District 1

Visited regularly by vacationers and travelers, the scenic North Coast counties of Del Norte, Humboldt, Mendocino and Lake are the home of District 1. Rugged, unspoiled Pacific coastlines, serene redwood forests and recreational lakes and rivers make this a prime destination for visitors from all countries.

District 1 employs 600 people who work to keep its 3860 km of roadway, 180 km of ramps and frontage roads and 488 bridges safe and efficient for use. The district will have 33 projects worth \$128 million underway this construction season. Included in these are:

- An \$18 million project to build 16.4 km of four-lane expressway just south of Hopland in Mendocino County.
- A \$31 million project to replace the Route 1 Noyo River Bridge in Fort Bragg.
- The \$40 million seismic retrofit of the Route 255 Humboldt Bay bridges in Eureka.

- A \$4.2 million project to add passing lanes on a steep grade on Route 20 at the Mendocino/Lake County line, to reduce delays due to slow truck and tourist traffic.

The district recently completed several major construction projects to enhance the safety and efficiency of the highway system:

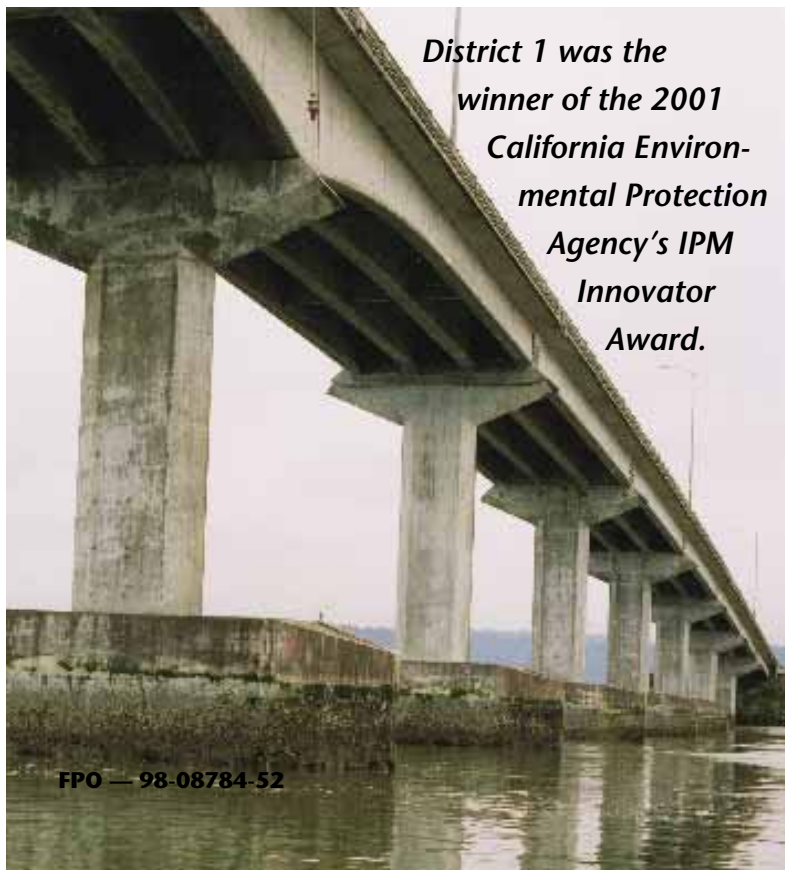
- The Route 101 realignment project at Cushing Creek (south of Crescent City in Del Norte County) was in response to a high collision rate. This \$9 million project eliminated compound curves in the roadway and installed paved shoulders, medians and special weather detection systems to alert motorists to changing roadway conditions. Constructed through old-growth redwood forests, it minimized adverse impacts to blend with the surrounding environment.
- The widening of Route 199 (also in Del Norte County, through what is commonly known as “The Narrows”) improved sight distances for motorists without impacting the character of the canyon walls. The project was located in the pristine Smith River Canyon, a highly sensitive national recreation area.
- A \$2 million project in Lake County to reconstruct the intersection of Routes 20 and 53 has resulted in a dramatic improvement to safety at that location.

Located in an environmentally sensitive area, District 1 has developed innovative methods for vegetation and pest management. In partnership with local agencies, interest groups and others, the district was the winner of the 2001 California Environmental Protection Agency’s IPM Innovator Award. It also received a 2001 Tranny Award from the California Transportation Foundation and a 2001 Excellence in Transportation Award for leading-edge vegetation and pest management practices.

The district is a leader in implementing context-sensitive solutions, using its techniques for problem definition, project scoping, design and construction, to provide better, more focused solutions in communities and scenic areas of the North Coast.

District 1 is performing a \$40 million seismic retrofit on the Route 255 Humboldt Bay bridges near Eureka.

District 1 was the winner of the 2001 California Environmental Protection Agency’s IPM Innovator Award.



District 2

During the past year District 2—comprised of the seven northeastern counties of California—employed 440 dedicated Caltrans staffers. The district also is host and partner to 245 North Region employees who design, provide environmental analysis of, coordinate right of way activities for and oversee construction on projects within the district.

District 2's combined staff operated this fiscal year on a \$75 million budget for personal services and operating expenses to support more than \$100 million in capital improvement projects.

District 2's portion of the state highway system includes 2816 km of freeway and conventional two-lane highway. The system—22 highway routes providing mobility for people and goods across the Cascade Wonderland—ranges from the floor of the Sacramento Valley to four separate river canyons, and climbs over the higher elevations of the Siskiyou, Cascade, Trinity and Sierra Nevada mountain ranges.

A major highlight of the year was the startup of the first Rural Transportation Management Center at Caltrans. Typically, such centers have been considered appropriate technology only for urban areas, where problems cannot be readily resolved by increasing the capacity of the system. District 2 has shown that these centers can also improve safety and emergency response and provide information—especially on road and weather conditions—to enhance the traveling experience.

District 2's Rural Transportation Management Center was selected for multiple awards this past year, as a winning entry in the 2002 Excellence in Transportation System Operations category and as a recipient of a Tranny Award from the California Transportation Foundation.

District 2 began several capital improvement projects during the year, including the first phase of a \$17 million project to replace an Interstate 5 bridge that crosses the Sacramento River near Anderson. In northern Tehama County,

a \$7 million project calls for a full interchange and the widening of the Adobe Road overcrossing on Interstate 5 at Red Bluff. In Siskiyou County, District 2 will expend nearly \$24 million to remove and replace the structural section of a 5.1 km, three-lane section of Interstate 5. A new Portland cement concrete surface will reduce the cost of maintenance caused by wear from truck traffic and severe weather conditions.

In northern Siskiyou County, nearly \$18 million is being used to rehabilitate 17.7 km of Interstate 5 in California where it enters Oregon. Pavement, drainage and safety improvements, along with new “intelligent transportation system” components, will highlight the project.

The district continues to evaluate environmental concerns involved in a proposed project to improve the Buckhorn Grade, a 12.8 km section of State Route 299 near the Shasta/Trinity County line. The project will open Route 299 to Interstate commerce trucks, improve safety and facilitate the movement of goods and people from the Sacramento Valley to the recreational areas, industries and deep-water ports of the North Coast in Humboldt County. The proposed \$150 million project has been given an accelerated schedule.

The environmental phase of a project to realign State Route 97 at Dorris is nearing completion. The \$20 million project would bypass three 90-degree turns in the city and provide a grade separation with the railroad, improving safety and eliminating the threat of overturned trucks and hazardous material spills while also speeding travel.



District 2 is leading the way in the installation and use of rural transportation management facilities.



District 3, in a unique, Web-based community involvement effort, gave Sacramentans a choice in the color scheme for the city's historic Tower Bridge.

District 3

District 3 in the North Region serves the needs of nearly two million residents in 22 of California's northern counties. District 3 is centered in Marysville, a town that's famed as California's "Gateway to the Goldfields." The district extends south toward the capital city of Sacramento, east over the Yolo Causeway, north through Sacramento Valley towns and east over the majestic Sierra to the shores of crystal-blue Lake Tahoe.

North Region—the project development organization for Caltrans Districts 1, 2 and 3—includes the units of design, construction, right of way, environmental and other engineering support. North Region staff, which consistently has met or exceeded the department's performance measures, will soon begin work on 38 major projects worth \$202 million. Sixteen of those, worth \$129 million, are in District 3.

District 3 has an operating expense budget of \$53 million and employs a staff of 2100. More than 2300 km of state and federal highway traverse this sprawling district. The district's highway inventory includes Interstates 5 and 80, State Route 49 ("Gold Country Route") and nearly 100 km of scenic U.S. Highway 50, which rises up and over the precipitous Echo Summit.

District 3 began the year with an innovative campaign to obtain community input on a project to repaint Sacramento's historic Tower Bridge (State Route 275). An interactive Web site and toll-free hotline were set up so Sacramentans could choose between gold, green and burgundy color schemes that were designed to enhance the landmark's appearance and blend into a revitalized Sacramento River waterfront. More than 42 000 Sacramentans chose metallic gold. The District 3 maintenance crew and the District 4 paint crew expedited this project, and all painting will be complete by 2003.

This past spring, District 3 continued work to relieve congestion at a Sacramento-area traffic bottleneck known locally as "The Split." This \$8 million project will add an additional lane on the connector ramp from westbound Interstate 80 to the Capitol City Freeway, easing the way for nearly 200 000 vehicles per day.

District 3 also continued work on Interstate 80 through the rugged Sierra, rebuilding 145 km of this important corridor between Roseville and Nevada. Begun in 1998, this massive undertaking is more than one-third complete. This spring, work continued at Gold Run, Truckee and east through the Truckee River Canyon between West Boca and Floriston.

Nearby, work is nearly complete on the Truckee bypass, a \$33.6 million project in Nevada County to relocate State Route 267 east of Truckee. This project includes a new Interstate 80 interchange and a 500 m bridge to ferry ski and tourist traffic over the Truckee River.

By fall, the district will break ground on a \$15.6 million project to widen State Route 99 from two to four lanes in Sutter County. When complete in 2004, 20 km of extra capacity will be added to this growing corridor. The new lanes are supported by the Sutter 99 Safety Group, a task force of state and local agencies that recommended several safety measures, including passing lanes, for a highway where 16 people lost their lives in 1997. To the east, a \$23.2 million project will add 23 km of new highway lanes to State Route 70 in Yuba County.

District 3 continues its efforts to improve the environmental quality of Lake Tahoe. The 2002 State Highway Operations Protection Plan adopted by the California Transportation Commission includes \$101 million in erosion control and stormwater treatment projects in the Tahoe Basin. These projects are planned for every kilometer of state highway in the basin. So far, 47 km of stormwater treatment work is either complete, going to construction or accelerated in design.

This past spring, District 3 continued work to relieve congestion at a Sacramento-area traffic bottleneck known locally as "The Split."

District 4

Caltrans District 4 is made up of the nine counties that surround the San Francisco Bay. The Bay Area is a vibrant blend of the Silicon Valley miracle, semi-arid valleys, excellent agricultural resources and recreational attractions for all tastes, in a setting of natural and created beauty.

District 4 is bounded by the Pacific Ocean to the west and the Central Valley to the east. The coastal hills run directly through the center of the Bay Area where land features are literally split apart by earthquake faults. San Francisco and San José are centers for finance and high-tech development. The area is home to major movie companies including Pixar Studios in Richmond and George Lucas' Industrial Light and Magic in Marin County. The district contains one of the premier wine-grape regions of the world, in Napa and Sonoma Counties.

With an operating budget of just under \$200 million, the District 4 headquarters in downtown Oakland is home to more than 4000 employees, including field staff. The district is working on more than \$3.5 billion in projects under construction and an additional 665 projects in development on its 2293 km of state highway.

The San Francisco Peninsula is home to the Caltrain commute rail service that has operated since the Gold Rush along the west side of San Francisco Bay. In 1980 the department stepped in to continue its operation when the Southern Pacific Railroad attempted to discontinue service.

District 4, headquartered in Oakland, oversees transportation activities in the nine San Francisco Bay Area counties.

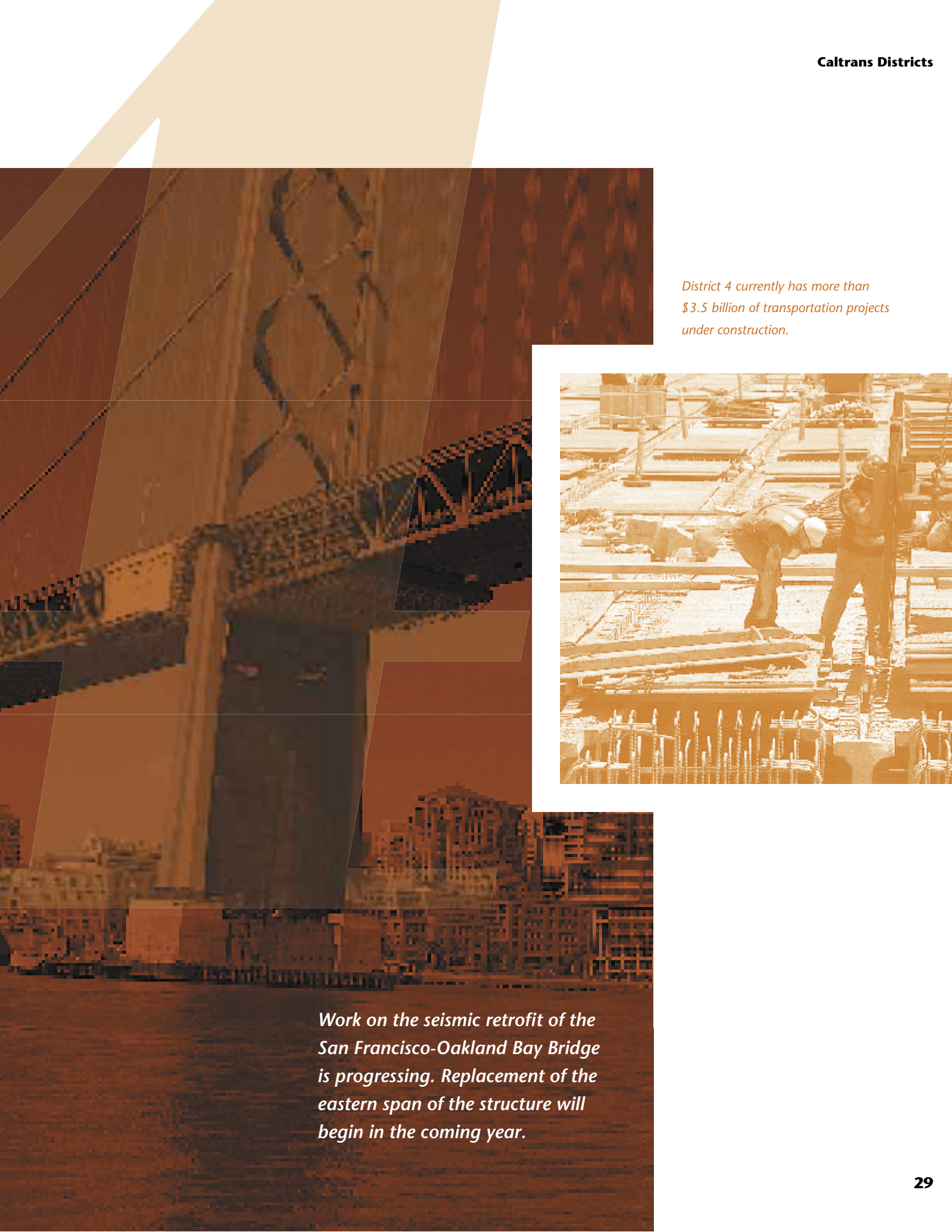


In this environmentally sensitive area, Caltrans District 4 operates seven toll bridges that carry record numbers of vehicles each year. In response to the growth of the Bay Area, major bridge projects have been undertaken. The district is widening the San Mateo-Hayward Bridge in a \$129 million project, and retrofitting both the San Francisco Bay Bridge and the Richmond-San Rafael Bridge for seismic safety. District 4 is replacing the older Carquinez Bridge with a new, exciting \$240 million suspension span and adding a new \$318 million structure to the Benicia Bridge, increasing its size from six lanes to 10. In-house architects have designed new toll plaza administration buildings to grace new approaches to the Bay Bridge and Benicia-Martinez Bridge. The district has completed Fas-Trak electronic toll collection on all lanes on all the bridges this past year, saving countless motorists hours of delay at the toll booths.

The district began a \$2.6 billion project this spring to replace the east span of the San Francisco-Oakland Bay Bridge. The new bridge will consist of a skyway arching up to a self-anchored suspension bridge—a design that is unique in the world. The San Francisco approach to the Bay Bridge will be replaced in a \$248 million project beginning in the fall of 2002. This will tie into the \$170 million retrofit of the bridge's west span.

Construction will soon start on a \$275 million tunnel along Highway 1, 48 km south of San Francisco. The tunnel will solve a decades-old problem of maintaining the unstable coast-side roadway.

From the gently twisting highways of the North Bay valleys to the throbbing beat of the bridge traffic to the cable ferries of the Sacramento River Delta, the Bay Area's transportation challenges are as diverse as its people. The employees of District 4 are an integral part of this great region. They take pride in contributing to its successes and are eager to tackle the problems that come with a growing community.



District 4 currently has more than \$3.5 billion of transportation projects under construction.



Work on the seismic retrofit of the San Francisco-Oakland Bay Bridge is progressing. Replacement of the eastern span of the structure will begin in the coming year.

District 5

District 5, headquartered San Luis Obispo, serves Santa Barbara, San Luis Obispo, Monterey, Santa Cruz and San Benito Counties. The district contains 33 cities with a population of more than 1.3 million. It operates 29 freeways which, if placed end-to-end, would stretch for 1880 km. U. S. 101, running the length of the district, is one of three major north-south routes connecting Los Angeles and San Francisco. District 5 is home to scenic State Route 1, serving special attractions at Santa Barbara, Morro Bay, Hearst Castle, Big Sur, Monterey and Santa Cruz.

District 5, with a staff of 480, is part of the Central Region, which coordinates capital outlay support resources. District 5's allocation for personal services and operating expenses last year was \$47.8 million.



District 5 has had a busy year, moving into a new rural transportation management center and continuing work on the \$38 million Cuesta Grade project.

In the past year, District 5 staff completed a resource inventory of the 120 km State Route 1 corridor in San Luis Obispo and Monterey Counties as part of the Big Sur Coast Highway Management Plan.

District 5 Local Assistance helped agencies deliver more than 400 projects valued at \$95 million. The Local Assistance training program completed its first full year, offering a wide array of classes and providing training to more than 400 participants.

District 5 received a Tranny Award for emergency repairs at the State Route 1 Forest Boundary Slide in Monterey

County, and several Superior Accomplishment Awards for expediting permits to enter private property, for use of Gantt charts as a project management tool in environmental scoping and for timely work in adding a fish ladder on the San Luis Obispo Creek bridge widening project.

The district completed several construction projects in the 2000–2001 year.

- State Route 1 in Santa Cruz: Mission Street, a \$7.1 million, four-lane highway project with left turn pockets at major intersections.
- San Luis Creek Bridge Retrofit: originally scheduled as a seismic retrofit, the project was enhanced by a fish ladder that has been positively received.
- State Route 1 Rehabilitation in Guadalupe: an \$854 000 project to resurface the highway through town. Fifty trees were planted in the downtown area.
- Anapamu Pedestrian Bridge: a \$959 000 seismic retrofit of the Anapamu pedestrian bridge in Santa Barbara.

The following projects are in progress:

- A \$38 million Cuesta Grade project to add truck climbing lanes and improve safety and traffic flow over the grade on U. S. 101.
- A \$6.8 million project at U.S. 101 and San Miguel Canyon Road to construct an interchange to improve circulation and safety.
- A \$7.4 million U.S. 101/Route 156 interchange improvement project.
- A \$13.8 million resurfacing project on U.S. 101 between Carpinteria and Santa Barbara.
- Rehabilitation of State Routes 135 and 166 in Santa Maria.

In December 2001, Director Jeff Morales appointed Gregg Albright as the new director of District 5. Albright has more than 20 years of Caltrans experience and is proud of this year's accomplishments in improving relationships with regional agencies, counties, cities and the public through the use of context-sensitive solutions. He terms 2001–2002 a "cooperative year."

District 6

District 6 is headquartered in Fresno. This geographically diverse district is the second-largest in area of the 12 districts statewide and stretches from the southernmost part of Yosemite National Park to the Mojave Desert. The district includes Madera, Fresno, Tulare, Kings and Kern Counties.

From mountain peaks to desert floor, District 6 is home to 1528 employees who build, maintain and operate 762 km of freeway and 2486 km of rural and urban highway. The district maintains 3248 km of centerline roadway, the most maintained by any Caltrans district.

Interstate 5 and State Route 99 run the length of District 6, serving as the main north-south arterials not just for the Central Valley, but for the entire state. These routes carry a significant amount of truck traffic (30 percent), which is vital to the region's agricultural base.

The district will have 85 projects totaling \$311.2 million under construction this year. These projects, a diverse array of California's multimodal improvements, support Governor Davis' Traffic Congestion Relief Plan. They vary from safety improvements like the State Route 33 Coal-inga Bridge Scour Project to cooperative projects with city and county partners, such as the beautification and modernization of the State Route 99 corridor through Fresno. Other projects include:

- State Route 180 East Sequoia Freeway in Fresno County, a \$168 million project that will consist of constructing 12.9 km of new freeway and upgrading, widening and improving 16.1 km of expressway.

- State Route 180 West in Fresno County, a \$30 million project on State Route 180 to provide an improved route between the city of Fresno and rural communities to the west. This project will reduce congestion on city streets, improve travel times and increase safety. The project will extend State Route 180 westward from the Route 99/180 interchange, and continue as a six-lane freeway from Route 99 to Tielman Avenue and as a four-lane expressway beyond that.
- The \$76.3 million State Route 58 Mojave Freeway Project in Kern County, to construct 16.1 km of new four-lane freeway, drastically decreasing congestion in downtown Mojave. Improvements made to this area will allow through-traffic to flow uninterrupted on the new access-controlled freeway.
- A \$9 million overlay and median barrier project on State Route 99 in Madera County, to restore deteriorated concrete panels and overlay the asphalt.
- A \$47 million project to widen State Route 99 from four to six lanes in Fresno County between Kingsburg and Selma. The project will construct two new concrete lanes in the median and add concrete shoulders and median barrier. It will also rehabilitate the pavement and ramps and replace planting after removal of oleander median planting.

District 6 received a 2002 Tranny Award in environmental enhancement for its role in developing the San Pablo Family Park in conjunction with State Route 180 in Fresno.

District 6 will have 85 projects totaling \$311 million under construction this year, a diverse array of multimodal improvements.

District 6 will have 85 projects totaling \$311 million under construction this year, a diverse array of multimodal improvements.

District 7

Caltrans District 7 encompasses Los Angeles and Ventura counties. The 87 cities and 10 574 km² of Los Angeles County are home to more than 9 million people. The 27 freeways within District 7, if placed end-to-end, would stretch for 990 km. There are 615 km of conventional highways in Los Angeles County. Ventura County—which covers an area of 4850 km², with 10 cities and a population of more than 700,000—has 297 km of conventional highways and 142 km of freeways.

In May 2002, Governor Davis kicked off the groundbreaking of the new District 7 headquarters building in Los Angeles. The 13-story, 66 000 m² facility will cost

\$190 million and will facilitate the work of one of the department's busiest districts, acting as a cornerstone of the reinvigorated downtown Civic Center. The district held a grand opening for its new maintenance equipment training center, which will train about 400 employees annually.

District 7 operates 620 km of high-occupancy vehicle (HOV) lanes in Los Angeles County, with 95 km under construction and an additional 369 km proposed. About 700 000 people use these lanes every day.

Last year the 2910 District 7 employees—with annual personnel and operating expenses of \$294 million—delivered 66 projects worth \$293 million to the California Transportation Commission and, for the first time, was honored as the statewide leader in project delivery.

The district expended \$115 million on highway maintenance work, in-

cluding \$2 million to improve roadside appearance.

The Office of Project Studies completed 12 project initiation documents for \$212 million in construction-capital dollars. Six formal value-analysis studies were completed for 10 projects, with a total construction cost of \$435 million.

The Traffic Analysis Branch completed simulation modeling for seven projects, traffic analyses for 35 projects, benefit cost analyses for one project, growth factor analyses for 27 projects, trip generation analyses for two projects and screenline analyses for two projects.

The Geographic Information Systems (GIS) Branch released the Project Focus intranet map tool for locating projects and construction plans, built needed Web sites, updated the GIS library and provided maps for media events.

The district established a new Community-Based Planning Branch to address a need for community-sensitive approaches to transportation decisions. The new branch conducted grant application workshops, performed outreach and participated in training programs that included the South Bay Council of Governments' Smart Growth Conference.

Work continued on the final \$48 million Los Angeles County phase of the Foothill Freeway to connect Interstate 5 in Los Angeles County with Interstate 10 in Redlands, 120 km away. The Los Angeles County portion represents \$310 million of its \$1 billion total cost, with the first segment—between San Dimas and the San Bernardino County line—to open in September 2002.

Five sound wall projects were under construction, with a total expenditure of \$11.3 million. Forty-two sound-wall projects will be delivered by 2005 as Caltrans works with communities to develop new sound-wall designs that reflect local preferences.

Work continues on a \$23 million project on the Long Beach Freeway between the Pacific Coast Highway and the San Diego Freeway, using an innovative long-life asphalt pavement strategy. The project will rehabilitate the pavement, widen the right-hand shoulders and upgrade the median barrier to concrete. Completion is expected in 2003.

A groundbreaking ceremony in the San Fernando Valley launched the Valley Gateways Project in October 2001. In partnership with the Economic Alliance of the San Fernando Valley, Caltrans and others are beautifying about 30 freeway on- and off-ramps that serve as gateways to San Fernando Valley communities.



Governor Gray Davis kicked off construction of a new \$190 million Caltrans office building in downtown Los Angeles in May 2002.



On February 8, a 14.5 km stretch of the Santa Monica Freeway was officially named the Rosa Parks Freeway in honor of that civil rights hero.

In February 2002, Governor Gray Davis was on hand to celebrate the opening of a 12.6 km high-occupancy vehicle (HOV) lane on the San Diego Freeway between the San Fernando Valley and west Los Angeles. Since its opening, users have saved an average of 18 minutes on every commute. Work began in February 2002 on projects on the Golden State Freeway in Santa Clarita, to replace the Magic Mountain and Santa Clara River Bridges.

On February 8, a 14.5 km stretch of the Santa Monica Freeway was officially named the Rosa Parks Freeway in honor of that civil rights hero. The district celebrated the opening of the Valencia Boulevard Bridge replacement and widening in the city of Santa Clarita on February 12.

On February 26, District 7 unveiled its first-ever “Don’t Drink and Drive” freeway sign on the Antelope Valley Freeway near Acton, in memory of Callie “Joel” Buser, a Caltrans surveyor who was killed while performing survey work by a drugged driver.

In March 2002, Caltrans broke ground for a \$41.5 million HOV lane and lane-widening project on the San Bernardino Freeway between Baldwin Avenue and the San Gabriel River Freeway in El Monte and Baldwin Park. Also in March, Caltrans and the city of Long Beach held a grand opening for the new Carson Street loop ramp, providing access to the northbound San Gabriel River Freeway.

In April 2002, Governor Gray Davis was the keynote speaker at the grand opening for the \$2.4 billion Alameda Cargo rail-cargo expressway. The project is one of the nation’s largest and most anticipated public works projects—a 32.2 km long rail-cargo expressway linking the ports of Long Beach and Los Angeles to transcontinental rail yards near downtown Los Angeles.

Also in May, Caltrans broke ground on the \$112 million Ventura Freeway Bridge replacement and interchange reconstruction project. The project will provide additional lanes on Route 101 between Vineyard Avenue in Oxnard and the Montalvo Overhead in Ventura, a distance of 3.2 km. It will replace two bridges with a single 12-lane bridge, construct bike lanes, reconstruct the Ventura Road undercrossing and combine it with the new Santa Clara River Bridge, provide new on and off access for local-area motorists and reconstruct the Oxnard Boulevard interchange.

District 8

Caltrans District 8 encompasses 12 500 km² of mountain, desert and agricultural areas in San Bernardino and Riverside Counties. The 12-story district office, home to more than 1450 employees, is in the heart of downtown San Bernardino. Its operating expense budget last year was \$168 million.

The district was a hub of transportation improvement activity last year, hitting the road running with a well-attended ceremony in August to celebrate two openings:

- The 15/30(210) interchange, named the William E. Leonard Interchange in recognition of his dedication to the county of San Bernardino and its transportation issues.
- 7.4 km of the new Foothill Freeway, which is only the beginning to an east-west corridor connecting the Inland Empire to Los Angeles County. An additional 22.5 km, to connect the completed section with the 210 freeway in San Dimas to the west, are under construction and will open to traffic by the end of 2002.

As the district made history with the opening of the new freeway, it also took time to reflect on its own history. Excavations under the former District 8 building on 3rd Street unlocked a trove of information about San

Bernardino's past, particularly of the Chinese immigrants who formed a community in the late 1800s in what is now downtown San Bernardino. The district conducted tours for the public and the media. National Geographic Television and Inland Empire Magazine each ran stories about the discovery.

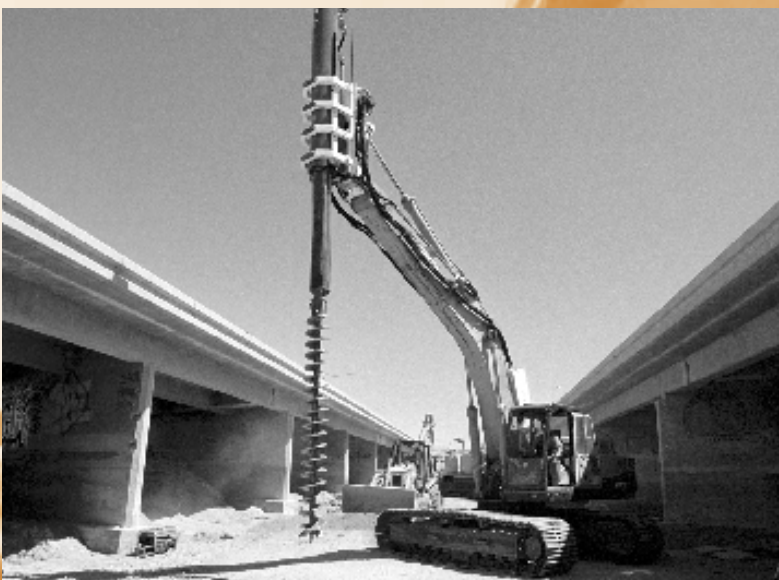
In February, District 8 and the Riverside County Transportation Commission opened an 8.5 km truck climbing lane on Interstate 215 between the cities of Riverside and Moreno Valley. This \$9.4 million project, a major contribution to improving mobility across California, will greatly reduce congestion on this heavily traveled freeway.

In March, Governor Gray Davis and Nevada Governor Kenny Guinn shared the stage to break ground for the widening of 41.8 km of Interstate 15 between Victorville and Barstow. This \$120 million project is implementing the innovative and time-saving design-sequencing process. Davis also announced the commencement of the \$24 million Etiwanda Avenue interchange reconstruction project near the Interstate 10/15 interchange and the Burlington Northern Santa Fe rail facility.

This year brought to completion District 8's study of the High Desert Corridor, yielding a plan whose goal is to improve the movement of people and goods throughout northern San Bernardino County. Included in this vision is the widening of U.S. 395 to a four- to six- lane expressway between Interstate 15 and State Route 14.

As the fiscal year closed, the Marvin M. Black and the 2001 Excellence in Partnering Gold Awards were presented to District 8 Construction and its partners—Granite Construction, the Torres-Martinez tribe and the Coachella Valley Water District—for the successful delivery of the three-phase, \$250 million State Route 86 project that links Riverside County with its neighbors to the south. District 8 was also honored with the 2001 FHWA Value Analysis Award for work performed on Interstate 215 in San Bernardino.

District 8 had an impressive \$678 million in active freeway construction projects going in the fiscal year, including the Route 15/30 (210) interchange, shown.



District 9

District 9, created in 1923, covers several Eastern Sierra counties, including Mono, Inyo, eastern Kern and portions of San Bernardino. The district—which employs 214 staff, 145 of whom work in maintenance—plans, maintains, operates and improves 19 routes, or about 7 percent of the state system. U.S. Highway 395, which either bisects or accesses directly most communities in Mono, Inyo and Kern Counties, represents 457 km of this total.

Because there are no commercial passenger air or rail services and air-freight services are minimal, the U.S. Highway 395/State Route 14 corridor is a conduit for the movement of goods. The route serves Yosemite National Park, Death Valley National Park, Devil's Postpile National Monument and a number of other scenic destinations. It is in the state Scenic Highway Plan, part of the Strategic Highway Network, designated as a military route, a Blue Star Memorial Highway and an Interregional Road System/High Emphasis Focus Route.

In the last fiscal year, District 9 assisted the regional planning agencies of Inyo, Mono and Kern Counties to further U. S. 395/State Route 14 corridor development, secure funds for preliminary engineering for a 72 km segment of U.S. Highway 395 between Interstate 15 and State Route 58 and prepare plans and improvement programs.

The district—which coordinated lifeline transit service after Greyhound discontinued services in the eastern Sierra—is working with regional agencies and transit providers to improve service. It cooperated with the Inyo County Local Transportation Commission to obtain funding for a transit facility in Bishop and assisted the Bishop Union Elementary School District in securing funding through the Safe Routes to School Program.

A six-member team of the District 9 Central Region/Bishop Survey Department won the Award for Excellence in Transportation in system operations, by using the real-time surveying method on the Mojave Freeway Project in Kern County.

The district will expend \$3.9 million at various locations to improve traffic signals, drainage, intersections and rest areas, and to install guardrails and flatten slopes.



District 8 moved into the impressive new \$3-million Shoshone Maintenance Station in the fiscal year.

The following projects are under construction:

Replacement of the Sardine Creek Bridge on State Highway 108 in Mono County near the Tuolumne County Line: \$1.0 million.

Installation of new concrete sidewalks on State Highway 158 in the town of June Lake: \$500 000.

Widening of 10.9 km of U.S. Highway 395 from two to four lanes in Mono County near Lee Vining: \$20.0 million.

Rehabilitation of U.S. Highway 6 in Mono County near Benton: \$8.6 million.

Rehabilitation of the roadway on State Highway 203 in Mono County in the town of Mammoth Lakes: \$5.3 million.

The following projects were completed:

Widening of 14 km of U.S. Highway 395 from two to four lanes near Big Pine: \$25 million.

Installation of sidewalks and resurfacing of U.S. Highway 395 in Lee Vining in Mono County: \$1.6 million.

Rehabilitation of 21 km of U.S. Highway 395 near Coleville in Mono County: \$5.3 million.

Shoshone Maintenance Station: \$3 million.

Topaz passing lanes in Mono County near Coleville: \$3.4 million.

District 10

District 10 includes the five foothill and mountain counties of Alpine, Amador, Calaveras, Mariposa and Tuolumne, comprising the heart of the Mother Lode country. Three valley counties—Merced, San Joaquin and Stanislaus—form the northern portion of the San Joaquin Valley, including the rich Delta region. In size, this eight-county area covers approximately 26 000 km².

Part of the Central Region, the district has a staff of 490 and an operating budget of \$26.6 million. It provides planning, maintenance, local assistance and traffic operations services to its 5906 km of highways, which include four Sierra passes. Maintenance operations are divided into six areas with 23 maintenance stations.

The district recently installed approximately 160 km of median barriers. With continued commitment to improving safety, the district has several additional median barrier projects in construction, with more projects on the way.

District 10 worked closely with the San Joaquin Council of Governments, the City of Ripon and San Joaquin County to complete the \$18 million Jack Tone Road interchange project. The project relieved traffic congestion, eliminated an at-grade railroad crossing and improved ramps to accommodate truck turning movements.

Construction continues on the \$39.4 million East Sonora Expressway Project in Tuolumne County on State Route 108, with completion anticipated in the fall of 2004.

Groundbreaking was held on June 17, 2002 for the \$32 million Arch Road Project on State Route 99 in San Joaquin County. This single-point urban interchange is the first in the Central Valley and the third in the state. When complete, the new interchange will accommodate 70 000 vehicles.

District 10 responded to the growing needs of the Central Valley by completing the \$26 million Delhi Freeway Project. The project converted 4.9 km of State Route 99 to freeway standards, providing a continuous freeway on State Route 99 between south of Livingston and Sacramento. This project moves District 10 one step closer to converting all of Route 99 within District 10 to full freeway status, which has been a long-standing priority of the state and regional agencies.

In Merced County on State Route 99, the Plainsburg Road Freeway Project is underway to widen and upgrade the four-lane expressway to a six-lane freeway between the Madera County line and Buchanan Hollow Road. The project is scheduled to go into construction in October 2003. The cost, estimated at \$30.8 million, will be fully funded with Interregional Improvement Program funds.

The Arboleda Drive Freeway Project proposes to upgrade State Route 99 from a four-lane expressway to a six-lane freeway. The project, between Buchanan Hollow Road and Healy Road, is scheduled to begin construction in the spring of 2005, at an estimated cost of \$124 million. The project, in conjunction with the Plainsburg Road Freeway Project immediately to the south, will eliminate 15 at-grade intersections, remove operational deficiencies and provide needed capacity for the next 20 years, bringing this remaining section of State Route 99 in the San Joaquin Valley to full freeway standards.

The \$59.7 million Mission Avenue Interchange Project will convert 3.5 km of State Route 99 between McHenry Road and Childs Avenue from a four-lane expressway to a six-lane freeway. The project also includes construction of a full interchange at Mission Avenue and a frontage road.

A \$32 million project will widen State Route 99 from four lanes to six lanes between State Route 4 and Hammer Lane in Stockton. Construction is scheduled to start in the fall of 2002 and be completed by 2005.

Work continues on the \$39.4 million East Sonora Expressway project on State Route 108 in Tuolumne County.



District 10 is performing environmental studies for a \$97 million project to widen Interstate 205 from four to six lanes between 11th Street in Tracy and Interstate 5. The project is scheduled for construction in July 2004.

Two bypasses—on Interstates 580 and 205 between the San Joaquin County line and 1.5 km west of Grant Line Road, and on Interstate 205 between the California Aqueduct and the Interstate 205/580 junction—will divert truck traffic and provide relief to vehicular traffic. Construction for the \$13 million initial phase is scheduled to begin in July 2003.

Caltrans initiated construction on the Arch Road Interchange on State Route 99. The interchange will feature the first single-point interchange in the Central Valley.



District 11

District 11 has had an innovative and record-breaking year. District Director Pedro Orso-Delgado took the reins as head of the district in the middle of its most active construction program ever. More than \$900 million in projects are underway or will start this calendar year. This program includes several high-profile projects, including the widening of Interstates 5 and 805, oversight of the San Diego Trolley Mission Valley extension and the conclusion of construction on State Route 125.

The district is not just expanding the system; it is also making a significant commitment to the environment. About 80 hectares of coastal sage scrub—home to the California gnatcatcher, the least Bell's vireo and the Otay tar plant—have been set aside as mitigation for the upcoming Interstate 15 managed lane project.

Governor Gray Davis was on hand in February to break ground for a \$182 million project to widen the Interstate 5/805 merge. The project—to construct the Carmel Mountain interchange and build a second set of freeway lanes outside the existing ones—will separate merging traffic from through travel, enabling the freeway to handle more than 400 000 vehicles daily by 2020.

District 11 removed tolls from the San Diego-Coronado Bridge in June 2002.

Several stages of the State Route 125 project are open or will open this year, signaling the near completion of one of the longest stretches of new freeway in urban San Diego. When finished, crews will have built more than 16 km of new freeway through residential and commercially developed areas. By keeping residents and business owners aware of progress and planned construction, the few concerns brought by the community were quickly resolved.

With a \$1 million "intelligent transportation system" project, the district continues to work with its neighbors south of the border to improve cross-border transportation at the two commercial ports of entry that process \$29 billion in trade each year. Later this year, construction will begin on State Route 905 to relieve city street congestion by allowing truckers direct access to the state highway system.



District 11 officially inaugurated Teralta Park, an award-winning park that stretches over Interstate 15 in San Diego.

Caltrans Director Jeff Morales attended a ribbon-cutting ceremony at the Interstate 15 Teralta Neighborhood Park earlier this year. The park, constructed on a block-long, covered portion over the freeway, includes a large grass area, a basketball court and a play area. Recently recognized with an Excellence in Transportation Award for context-sensitive solutions, the park has helped residents see the new freeway project as a gathering place, instead of a line dividing the community.

The district has also been involved in a decision to remove tolls from the San Diego-Coronado Bridge at the end of June 2002. A ceremony hosted by the San Diego Association of Governments marked the end of the 33-year toll collection and the first free crossings for motorists over the bridge into Coronado.

Next year, District 11 will start construction on a \$375 million project to add four lanes in the median of Interstate 15 for carpools and transit, construct three transit centers with direct access to the new lanes and purchase new buses. The project—which is complicated by the presence of 200 000 vehicles passing through the construction area each day—involves the replacement of several bridges and construction over Lake Hodges, part of the San Diego reservoir system.

District 12

Established in 1984 and encompassing all of Orange County, District 12 has the distinction of being the only Caltrans district established by the California State Legislature. The county has 33 cities and is home to 2.8 million Californians. Orange County's 17 state highway routes, three private toll roads and one public toll road comprise 482 km of highway and 384 directional kilometers of high occupancy vehicle (HOV) lanes.

In 2002, District 12 had 44 projects under construction at a cost of \$678 million. Construction highlights included:

- A \$150 million project, funded primarily by Orange County Measure M, to link HOV lanes on Interstate 405 and State Route 55, creating a seamless connection between the two freeways.
- A \$54 million project to improve traffic flow on Interstate 405 and State Route 73 between Bear Street and Hyland Avenue.
- Accelerated delivery of seven sound walls on State Route 22 in Garden Grove, at a cost of \$32 million. Construction will be completed in December 2002.
- A project to modify freeway signage and striping on westbound Route 91, to eliminate a lane reduction and merge and enhance mobility and safety for travelers. To be completed in May of 2003.

Early in 2002, District 12 celebrated the completion of a \$118 million project to add one lane in each direction, widen freeway lanes and overcrossings and enhance traffic flow on State Route 55 between the Route 22 and 91 interchanges.

This year the governor's Traffic Congestion Relief Program provided District 12 with funds to construct a \$206.5 million project consisting of HOV lanes, auxiliary lanes and sound walls on State Route 22. In addition, the \$28 million Alameda Corridor East Project—to lower the Melrose Street and Placentia Avenue undercrossings to separate trains from vehicle traffic—supports the governor's plan by alleviating bottlenecks and conflicts between highway and rail traffic.

District 12's continued focus on improving multimodal transportation throughout Orange County is illustrated by the recent openings of the Tustin and the Laguna Niguel/

Mission Viejo commuter rail stations, both partially funded by state funds.

Caltrans provided \$7.9 million funding for congestion relieving operational improvements on State Route 91 corridor and \$28 million for rail improvements on the Riverside-Fullerton rail line.

The new District 12 Transportation Management Center officially opened this year with a celebration attended by state, federal and local officials. The \$12 million facility uses state-of-the-art technology to allow Caltrans and the California Highway Patrol, working together, to monitor traffic and road conditions throughout Orange County.

District 12 has partnered with local governments to develop aesthetic guidelines for fitting freeways into the context of local communities. An example is along State Route 91 in Anaheim, where Caltrans enhanced the landscape at Kramer and Tustin Avenues as part of the city's effort to revitalize the area and establish a significant economic corridor.

District 12 opened its \$12 million Transportation Management Center to allow Caltrans and its partners to regulate travel on Orange County's complex system of streets and freeways.



Caltrans Divisions

Accounting

The **Division of Accounting** performs the financial and accounting services required to support Caltrans' multi-billion dollar program pays employees, vendors and contractors; processes federal and local funds; collects on debts and provides financial statements and reports. Accounting complexities and the volume of funds, payments and collections require a staff of 450 and an annual budget of \$29.3 million.

This past year, the Division of Accounting paid more than one million vendor invoices, billed and collected annual revenues, abatements and reimbursements of \$2.8 billion and monitored and prepared financial statements for 26 different funds.

While the division's workload continues to grow, its staffing has remained relatively level. Even though a current hiring freeze and legislative mandates such as the Prompt Payment Act have made maintaining adequate service more difficult, the division has continued to improve business practices and stepped up efforts to provide training and resources to other departmental staff. In this way, it has reduced the errors that delay payments and increase workload.

For other Caltrans units, the division conducted training courses that related to the Prompt Payment Act, including travel policies and regulations, utility payments, draft purchase orders, the purchase card accounting and requisition system and conference rules and regulations. This

training, in combination with better communication, has reduced interest penalties and increased discounts gained.

Improvements developed by the Division of Accounting—including the timely dissemination of critical accounting information to thousands of users through the online accounting manual and the planning of more than 300 conferences—provided benefits to other areas of the department and saved more than \$500 000.

To expedite payments, accounting staff implemented electronic funds transfers for payments to local governments, reducing processing time by 10 days and resulting in fewer calls and inquiries from customers throughout the department.



The Division of Accounting continues to be recognized by other state departments. In fiscal year 2001–2002, the division received the State Controller's Office Award of Excellence for the financial statements it prepared for 14 different funds.

Administration Program employees support the mission-critical work of the department. The summaries below outline the program's accomplishments.

Business, Facilities, Asset Management and Security

The Division of Business, Facilities, Asset Management and Security provides services to support the department's safety, reliability, performance, flexibility and productivity goals. Last year, the Office of Business Services completed nearly 6000 reprographic jobs totaling more than 57 million impressions. The library staff responded to more than 3000 requests for information, while adding 1100 new volumes to its collection and 700 new links to its Web site. The Records and Forms Management Branch received almost 900 hits per day on its 850 online electronic forms.

The Office of Statewide Facilities negotiated 17 leases totaling more than 34 650 m². The office advanced new district office buildings in Districts 7 and 11, completed the \$2.7 million headquarters Fire, Life and Safety Project and remodeled the DOT TOT Daycare Center, which provides care to nearly 60 children.

Last year the Office of Security Operations implemented an enhanced, department-wide, security-access system and completed security audits of all district offices, equipment shops and laboratories to guide additional security improvements.

The division received the National Association of State Facility Administrators' Annual Innovation Award in recognition of its energy conservation program.

Human Resources

Staff from the Division of Human Resources and Division of Budgets developed a system to improve the management of positions and align Caltrans' authorized positions with the governor's budget. A major part of that effort was the creation of an automated position-tracking system that became operational in March 2002.

Operations analysts now offer training to supervisors and managers in hiring practices, duty-statement development, discipline, supervision of probationary employees,

the Family Medical Leave Act and workers' compensation via video conference or live presentations. More than 3700 supervisors participated in these sessions last year.

The Office of Examination and Recruitment administered more than 120 exams in technical and professional classifications and 26 career executive assignment exams. The transportation and environmental planner (natural sciences) was converted to an Internet-based exam plan. The state personnel board has approved the department's plan for a five-year demonstration project to streamline the filling of vacancies in managerial classifications.

Human Resources also re-established the Adopt-A-School Program to introduce elementary, middle and high school students to careers in transportation. Components of the program include academic mentoring, classroom presentations, career development workshops, job shadowing, departmental tours, high school fairs and scholarships. A major accomplishment of the program included the adoption of one school per district by June 2002.

Labor Relations

The Division of Labor Relations, serving managers and supervisors from its office in Sacramento and two satellite offices, is divided into three offices: Bargaining and Union Relations, Field Services and Drug and Alcohol Programs. The Bargaining and Union Relations Office represents the Division of Labor Relations at bargaining tables on issues such as memoranda of understanding that determine the salaries, wages and other terms and conditions of employment for about 20 000 employees. The Labor Relations staff works with managers and supervisors to resolve local issues with union representatives and to train supervisors and managers.

The Office of Drug and Alcohol Programs ensures compliance with laws and regulations governing drug and alcohol testing, with more than 10 000 employees affected. The office ensures Caltrans' compliance with rules for drug and alcohol testing of commercial driver's license holders and conducts drug and alcohol tests of other Caltrans employees as provided by various rules and agreements.

Following the events of September 11, the division increased its efforts to ensure the safety and security of departmental employees and guests.



The Materiel Warehouse reduced the proportion of back orders to 6 percent in the fiscal year.

During the year, the division adjusted 250 grievances, answered 14 unfair labor practice charges, and held 650 meetings to brief managers and supervisors. The staff provided 180 training sessions in labor relations topics for 4000 employees, and in drug and alcohol testing for 600 supervisors.

The division launched a “lessons learned” publication—directed to managers and supervisors—to explain grievance decisions that went against the department and to help avoid repeated mistakes.

Policy and Administration

The Division of Policy and Administration manages the resources for the administration program and various divisions. It manages out-of-state travel policy and processes and provides support for intranet application development.

Projects under development include an online application to provide status on employees’ out-of-state travel requests. The division assists with development of director’s policies, deputy directives and delegations of authority and preparation of the department’s strategic plan and organization charts.

Achievements include Caltrans’ 2002 survey of 4870 Caltrans employees, which yielded a return rate of 65 percent. The survey provides data to evaluate Caltrans’ status and performance.

Procurement and Contracts

As a result of Proposition 35, the Procurement and Contracts Division developed and expanded two units to accommodate an influx of contracts: the Office of Landscape Architecture and the Division of Engineering Services. The division created a database for more effective management of project delivery goals and executed 2374 contracts for a total of \$865.7 million.

The staff held a number of forums to promote contracting opportunities in response to the governor’s call for greater participation of small businesses in state-funded contracts and developed a Web-based statistical report.

Improvements to Cal-Card processing resulted in \$35 000 in prompt payment rebates. The acquisition and property control manuals and the “How to Do Business with Caltrans” handbook were updated with new requirements. The materiel warehouse reduced the proportion of back orders to 6 percent.

In partnership with the Right of Way Division, the Procurement and Contracts Division streamlined demolition and clearance contracts, making Right of Way staff-appraisal and expert-witness contracts—and Legal Division expert-witness contracts—more efficient by introducing continuous advertising.

Training

The Training Division completed three tracks of the new leadership training program designed for designated managers. This 12-module program consists of two-day sessions over a six-month period. Director Jeff Morales and the executive team comprised the first group to participate.

Ten managers were selected to participate in the second phase, an 18- to 24-month training and development assignment. Eighteen participants rotated into various districts, divisions or programs statewide. Five of the participants were promoted within 12 months of entering the program.

The **Division of Aeronautics** works with public and special-use airports, hospital heliports, regional transportation planning agencies and other local, state, and federal aviation agencies and aviation industry groups to develop and preserve a safe, environmentally sensitive and economically supportive aviation transportation system within the state. It fulfills its primary regulatory mission by issuing operating permits and conducting safety inspections of airports and heliports. It has 30 staff positions and an operating budget of \$3.2 million.

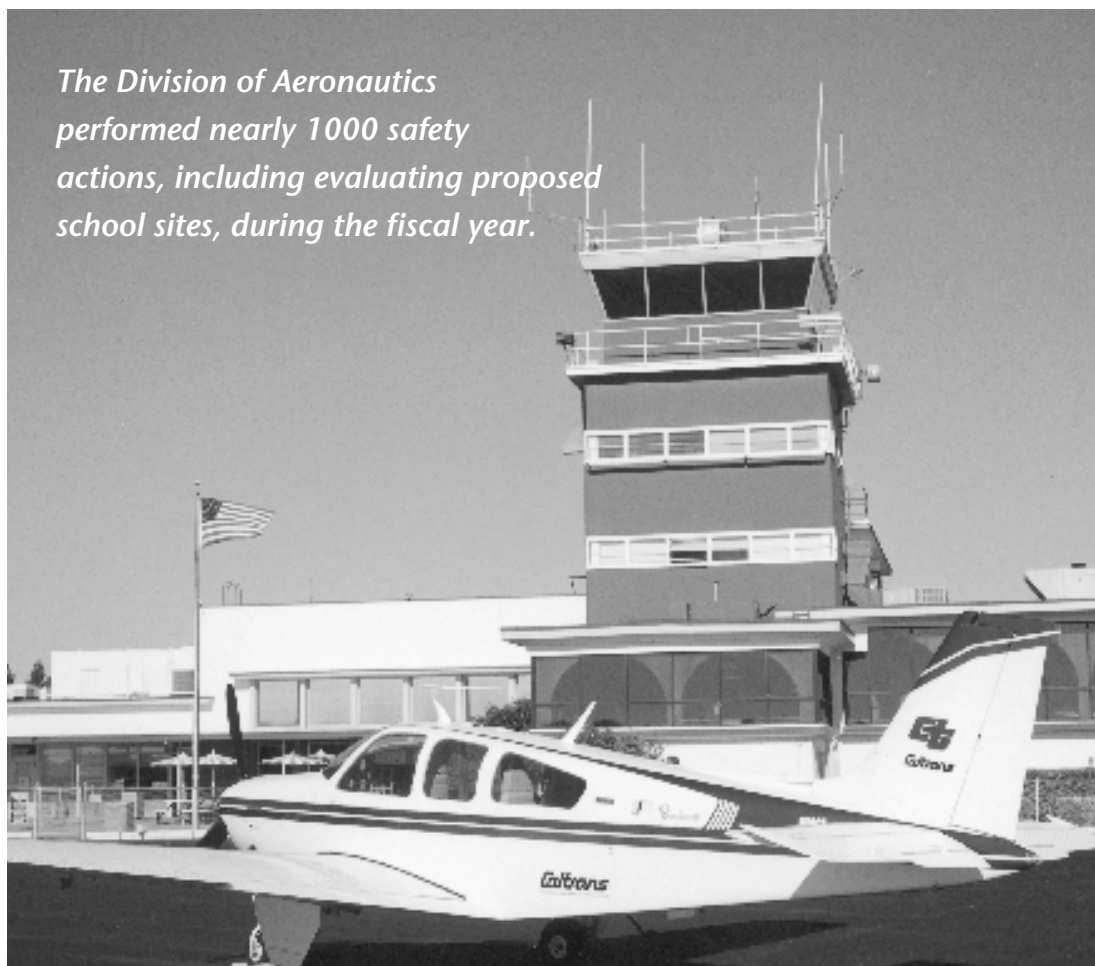
The division also provides airports and heliports with technical assistance in design, maintenance and administration. It develops plans to coordinate the overall state aviation transportation system. Grants and loans are provided to cities, counties, airport districts and airport land-use commissions for airport development, maintenance and planning.

The Division of Aeronautics administers the California airport noise regulations as well as other environmental programs. Division staff performed nearly 1000 safety actions, including evaluating proposed school sites, conducting safety inspections and providing helicopter landing authorizations at schools. Further, in the fiscal year the division awarded \$8.4 million of grants and loans to airports. The biennial update of the California Aeronautical Chart was released in May 2002, with a new, less cluttered format.

The division completed a revised airport land-use planning handbook based upon expanded analysis of accident locations, and released it to various planning agencies; it also is available on the Division of Aeronautics Web site. Also completed was a relational database that consolidated all of the airport and heliport information previously located on a mainframe computer at Teale Data Center. Portions of the database can be used by the public via the Web site.

Several efforts are in the development stage. These include a complete update of all the elements included in the California aviation system plan, a comprehensive economic impact analysis to identify the economic benefits provided by California's aviation system and industry, a statewide airport pavement management survey that started in June 2002 and coordination with the San Diego County and Southern California Regional Airport Authorities to develop an airport system in Southern California.

The Division of Aeronautics performed nearly 1000 safety actions, including evaluating proposed school sites, during the fiscal year.



Audits and Investigations

The **Division of Audits** and Investigations is budgeted for 72 positions and is divided into three sections: External Audits, Internal Audits and Investigations.

The External Audits section audits consultants to assist departmental management with contract management compliance, project management, program management and fiscal management. It also performs pre-award audits of consultants for various local transportation entities.

The Internal Audits section assists departmental managers by assessing goals, policies, procedures and internal controls. It evaluates business processes and the adequacy of program results and provides feedback on economies and efficiencies.

The Investigations section performs administrative investigations requested by departmental managers, staff and external sources. It provides an independent third-party review of complaints and reports its findings to the Investigative Review Committee for recommendations on corrective actions. The Investigations section also acts as the departmental liaison to outside agencies investigating Caltrans.



During the fiscal year, the Division:

- Completed more than 500 assignments.
- Audited \$22 million in construction claims that resulted in \$14 million in audit exceptions. (Ultimately, disallowed claims yield savings to the department.)
- Completed audits of the Caltrans system of internal controls as mandated by the Financial Integrity and State Manager's Accountability Act of 1981. This required the audit of 11 individual transaction cycles. These audits, conducted every two years, provide the director with a basis for certifying the adequacy of the department's internal controls.
- Continued its role of coordinating the audit work of outside audit organizations, such as the Bureau of State Audits and the Department of Finance, when they audit Caltrans' divisions and districts. To respond to external audit reports within five days of receipt and to provide status reports throughout the year, these assignments required coordination between Caltrans' divisions and districts, the executive office and the Business, Transportation and Housing Agency. The Division of Audits and Investigations completed 15 external audit coordination assignments during the fiscal year.
- To remain in compliance with the department's memorandum of understanding with the State Controller's Office, completed an annual audit of the Cal-Card program.

Budgets

The **Division of Budgets**, with 72 employees and an annual expenditure of \$5 million, manages the department's budget. Through its interactions with districts and divisions statewide, the budget staff secures resources and monitors expenditures.

The staff in the Division of Budgets develops and distributes quarterly financial reports that depict allocations, expenditures and projections, including program and fund-source information.

Over the past fiscal year, the division developed the 2002–2003 budget of approximately \$8.9 billion, providing an increase of approximately 14 percent from the previous year. The division also manages more than \$2.4 billion

in federal highway funds annually and authorizes federal-aid-eligible projects.

The division finalized fund estimates for the 2002 State Transportation Improvement Program and managed funds for the department's capital outlay programs. The financing package, prepared annually, provides an overview of the flow of dollars from taxes and fees, along with proposed category of expenditure.

The division held training classes for approximately 1300 district and headquarters personnel. The classes covered such subjects as federal aid, how Caltrans funds projects, Budgets 101, the budget monitoring system and how to write budget-change proposals.

The division successfully delivered the 2002–2003 target allocations to districts and divisions on June 14, 2002.

civil rights

The **Civil Rights Program**, with a staff of 90 and a budget of \$8.3 million, seeks to establish and maintain a work environment free from discrimination and to ensure compliance with all federal and state civil rights mandates. The Civil Rights Program seeks to increase the level of participation of disadvantaged businesses in federal contracting and continues to develop and implement new programs to accomplish Caltrans civil rights goals.

Caltrans' Civil Rights Program was the first in the nation to gain approval and implement a unified certification program as provided by federal law, significantly reducing burdens on small businesses seeking to participate in the disadvantaged-business enterprise program in California.

The Civil Rights Program's Small Business Enterprise/Disabled Veteran Business Enterprise Unit has developed and implemented a plan for participation of small businesses and disabled-veterans businesses in contracts. The unit has developed and implemented an outreach guide to be used as a "best practice" model. The San Francisco-Oakland Bay Bridge outreach coordinator is working with District 4 toll bridge personnel to increase the participation of disadvantaged businesses on contracts on the bridge replacement project.

Statewide Tribal Employment Rights Ordinance workshops were funded by FHWA to provide education and training workshops throughout the state. As a result, the California tribes who have participated in the program have improved economic conditions on their reservations.

The Mentor-Protégé Program is under development and will be implemented later this year via a pilot program in Districts 4 and 7; mentors and protégés have been identified. The program is designed to build effective working relationships between executives of mature construction firms and those of emerging disadvantaged-business enterprises, eventually producing a base of high-quality,

competitive and profitable companies. The Federal Highway Administration has provided \$1.5 million for such projects as the Triaxial Technical Assistance Program, on-the-job training programs and tribal employment workshops.

Caltrans has arranged to host the 2004 National Transportation Civil Rights Conference of the American Association of State Highway and Transportation Officials in San Diego, California—the first time this prestigious event will be hosted in California.

Civil Rights



The Caltrans Civil Rights Program became the first in the nation to gain approval of its unified certified program as provided by federal law for disadvantaged businesses.

Construction

The **Division of Construction**, with a staff of 67 and an operating budget of \$12.8 million, focuses its efforts on improving project quality, speeding project delivery and minimizing project-related congestion.

With more than 650 active contracts valued at \$6.5 billion, an average of one in five kilometers of highway was under construction last year. And while the value of ongoing projects was 50 percent higher than just three years earlier, staffing remained constant. More than 2200 district associates successfully oversaw completion of 550 projects worth more than \$1.5 billion.

The division completed a three-year project to rewrite its policy and procedure manual. This award-winning effort was a partnership between district associates and headquarters. Subject-matter experts balanced their regular workload with the demands of delivering a world-class manual.

The manual now correlates directly to the standard specifications. It includes innovative contract administration procedures and meets the

demands of today's complex environmental issues. The new manual formed the basis for 54 training classes that delivered more than 135 000 hours of training to improve project-delivery knowledge, skills and abilities. At least two other states have adopted the division's manuals on stormwater management as a basis for their own compliance efforts.

Other division projects included an innovative incentive program in air-emission reduction for off-road equipment, expansion of construction warrantees, refinement of time-related overhead, competitive bidding of contract time, task-based critical-path scheduling, sampling and analysis of stormwater runoff and real-time traffic information for motorists in construction zones.

The division's Engineering Standards Unit is participating in the newly created Pavement Standards Team, formed to ensure that California has the highest quality structural-

section design and rehabilitation strategies. One of the outcomes of this group was the development of a process for acceptance of a curing compound for use in Portland cement concrete. The changes resulted in dramatic improvements in compliance rates for curing compound.

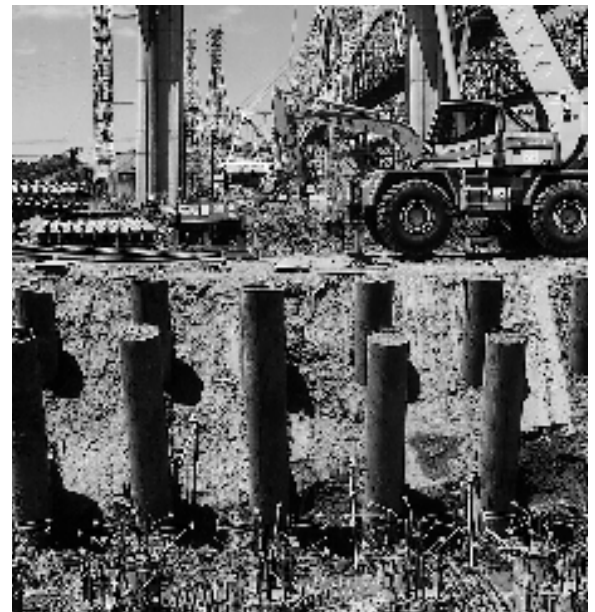
The division significantly improved the Internet submittal system for the extra work bills; it is now used on more than half the extra work bills submitted to Caltrans. This system has helped speed contractor payments, minimize unpaid extra work and improve reporting of the contract administration process.

Through improved contract specifications, the division worked with the industry to improve safety, manage energy-crisis-related risk, improve security on projects that were potential targets for terrorist attacks and minimize disputes arising from differing site conditions.

Along with the Division of Civil Rights, the Division of Construction encouraged participation of small and disadvantaged businesses, through the Mentor-Protégé Program. The program is a joint development between the Department of General Services and the Small Business Council's Construction Subcommittee.



One in five kilometers of highway was under construction last year, overseen by the Caltrans Division of Construction.



The division's system for extra work bills is speeding contractor payments and minimizing unpaid extra work.

The **Division of Design** assists Caltrans districts in improving the quality of design and delivery of engineering projects. The division, with a budget of \$13.3 million, consists of 83 positions in the following offices: State Geometric Design Standards, Landscape Architecture, Highway-Drainage Design, Pavement Design, Management Design, Professional Development, California Transportation Commission Appearances, Encroachments and Resource Conservation, Special Projects and Project Development Procedures.

The division produces the “Highway Design Manual” (the Black Book), the “Project Development Procedures Manual” (the Gold Book), the “Cooperative Agreements Manual” and the “Project Delivery Acceleration ToolBox.”

The division’s focus this year has been on developing partnerships within the department and with resource agencies and the public, through the Context-Sensitive Solutions Policy Initiative. This year the design and environmental divisions developed relationships with executives of state and federal resource agencies in an effort to speed approvals.

The division is incorporating the concept of context-sensitive solutions in all guidance for project design. Among the department’s many related, innovative projects, two are particularly noteworthy:

- The Olympic Boulevard Bridge in Los Angeles, District 7, required retrofitting to withstand a major seismic event, as well as restoration of its 1920s style. The restored 433 m bridge includes specialized light-standards and ornate railings.
- The Forest Boundary Slide on State Route 1 caused severe damage after intense rainstorms in February of 2000, requiring the design and construction of a stable roadway that was compatible with the environment and compliant with Coastal Zone and Endangered Species Act requirements. The

design included a 200 m long viaduct within the 367 m project length. Concrete tint and form inserts gave the railing a weathered look to address the Big Sur community’s concerns about appearance. The project was completed just 16 months after the damage occurred—about one-fourth of the time usually required.

Over the past year, the Division of Design updated the Highway Design Manual and improved Web sites with information about bicycle, pedestrian, hydraulic and roadside considerations. The division is reviewing and updating guidelines and standards for roundabouts, pedestrian and bicycle facilities and requirements for the Americans with Disabilities Act. It is partnering with other departments to develop quality assurance for safe, operational, maintainable and cost-effective projects that comply with legal requirements.

The Office of State Pavement Design provided technical support and services to three pavement demonstration-projects, including District 4’s San Mateo noise demonstration-project on Interstate 280, Central Region’s truck climbing lane project on U. S. 101 near

Last year’s Dixon Landing interchange project consumed hundreds of thousands of used tires for lightweight fill and brought the department awards for innovation in recycling.

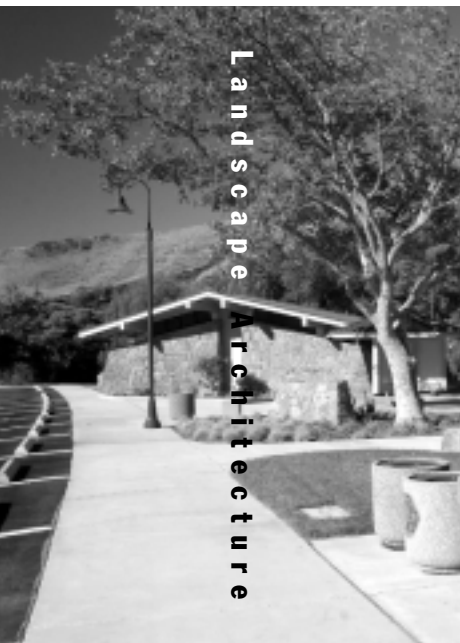


Carmel and District 7's long-life asphalt pavement project on Route 710 near Long Beach. The office also held two concrete pavement workshops in cooperation with FHWA and the American Concrete Pavement Association.

Last year's Dixon Landing Project, which used tire shreds as lightweight fill, brought the State Agency Recycling Recognition Award for Innovation to District 4 and the resource conservation unit. The unit also worked with maintenance staff to implement specifications and master procurement contracts for all colors and styles of LED traffic signals and battery-backup systems for intersections.

An Encroachment Exceptions Branch issue paper that addressed the telecommunications industry's need for backbone fiber-optic networks throughout California was approved and is being implemented with the Division of Traffic Operations.

The newly created Office of Stormwater Management has established a monitoring program to incorporate controls in project designs, in conformance with the statewide National Pollutant Discharge Elimination Permit. The office is also finalizing a new guidance manual for design and is scheduled to train more than 1000 staff next year. The office has already trained 500 staff in erosion-control measures.



The Office of State Landscape Architecture completed a 10-year plan for expansion and improvement of the California Safety Roadside Rest System.

The Office of State Landscape Architecture, with a staff of 274 within the Division of Design, addresses safety, modernization, visual assessment, roadside management and aesthetic issues in the delivery of quality projects.

The Office of State Landscape Architecture provides expertise on design for roadside management, safety roadside rest areas, context-sensitive solutions, transportation aesthetics, community gateways and main streets. It develops policy and guidelines to ensure statewide conformity of projects and procedures while accommodating and encouraging design flexibility.

Achievements this year include development of planting projects, training in context-sensitive solutions, a 10-year state highway operations protection plan that identifies

roadside improvements valued at \$1 billion and creation of new standard special provisions for roadside management features.

The office worked with District 6 and the local community to implement the first project of the Beautification and Modernization Program in Fresno. This \$6 million project successfully demonstrates design innovation and is spawning multi-agency and community interest in corridor planning in the entire San Joaquin Valley.

Last year, the office developed a statewide plan for safety roadside rest areas and continues to lead efforts to improve the safety roadside rest area system. The 10-year plan allots \$250 million for new rest areas and \$140 million for rest area rehabilitation.

The office took part in an effort that resulted in three California highways receiving National Scenic Byway designations. These join three existing National Scenic Byways in becoming eligible for special federal enhancement funding.

The office completed a California highway barrier aesthetics report in partnership with the Roadside Safety Technology Branch, which crash-tests barrier walls. The report provides designers with flexibility and tools to evaluate median barrier alternatives from both engineering and aesthetic standpoints.

The Division of Engineering Services

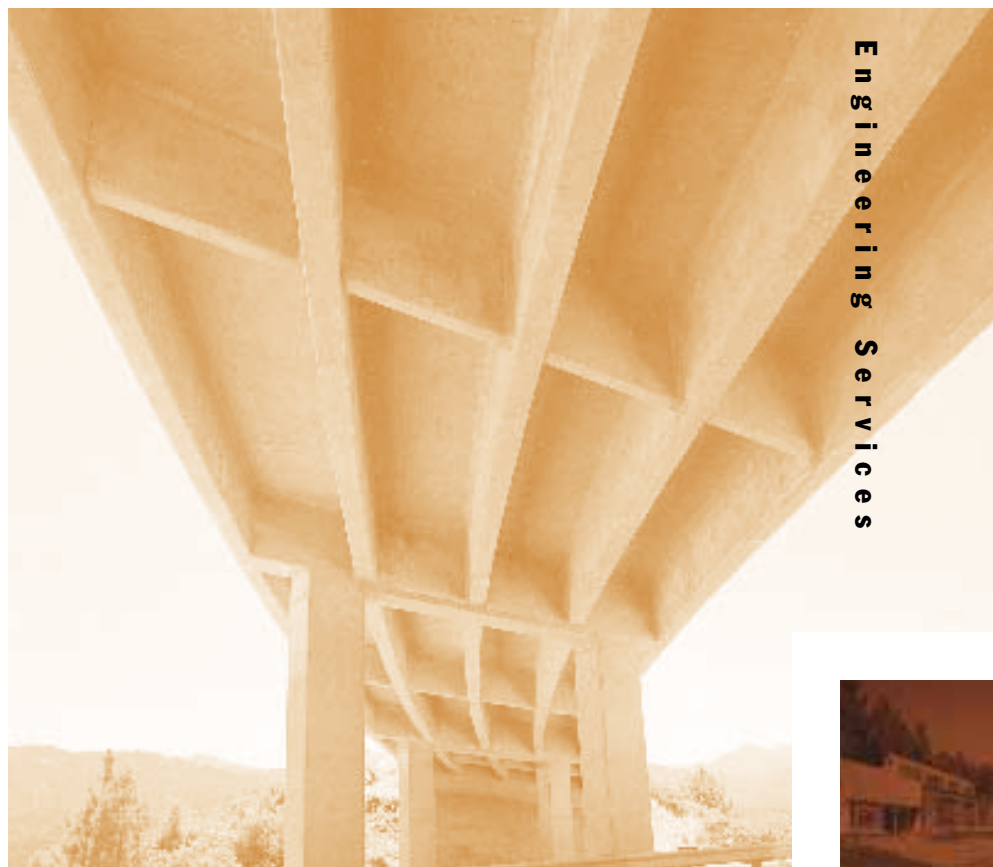
is comprised of 2000 employees who provide engineering products and services to the department's 12 districts and other clients. With a budget of \$322 million, the division produces a wide range of services, products and expertise—engineering and testing of materials, computer-aided design and drafting (CADD) services, photogrammetry mapping, earthquake engineering, contract awards, geotechnical services and design and construction administration of structures.

The division awarded 535 contracts this fiscal year, totaling more than \$3.1 billion, including the San Francisco-Oakland Bay Bridge skyway which, at \$1 billion, is the largest single contract amount in the department's history.

The division continued to provide a high level of CADD/GIS support, training of 2900 employees, responses to 2850 hotline calls, procurement and distribution of 3000 computers statewide and preparation of 700 000 scanned as-built plan files for use with the recently approved data-retrieval system.

The division delivered 92 percent of its photogrammetry products within the time negotiated with the customer, beating its goal of 90 percent on-time delivery. It reduced the duration of those efforts from 13.5 to 6.8 months for the last quarter of the year, approaching the goal of six months or less.

The division spearheaded a humanitarian effort, encouraging the donation of plywood that had no re-use value to the supplier, for Habitat for Humanity. Habitat for Humanity will use the wood to build shelters for low-income families near the separation structure at Interstate 5 and Routes 89 in Dunsmuir.



The division also completed the following activities to improve project delivery during the fiscal year:

- eBid (Electronic Bidding): a pilot project for electronic bidding of construction projects, sponsored by the Department of General Services. iBid, a Caltrans follow-up effort to put a full scale electronic bidding system into production, will be operational in 2004-2005.
- District delegation of Authority to Advertise, fully implemented in October 2001: approximately one third of eligible Minor A, Maintenance and SHOPP projects under \$1 million were advertised under this authority. This process delegates authority to the district or region directors to certify that project plans are complete, constraints are clear, funds are available and the project is ready to advertise.
- Elimination of 1:200 Scale Structure Site Maps: after CADD process implementation, eliminated hand-drafting on hard-copy manuscripts. Projected annual savings from more efficient use of photogrammetry resources approach \$200 000.

The Division of Engineering Services awarded 535 contracts worth more than \$3.1 billion in the fiscal year.

- Translab Mitigation Plan: a four-phase Translab project management plan to address facility needs, employee safety and project delivery demands at the transportation laboratory.
- Creation of the Pavement Standards Team: one-stop shopping for solutions to pavement issues, problems and specifications for new projects. Consolidates all pavement-related functions and responsibilities in one location and designates stewards of pavement-standard specifications and special provisions.
- Outreach Training: an innovative, interactive training program for project managers, project management support and district design staffs to improve relationships between the division and its customers and to share and exchange knowledge on engineering products.

Environmental Analysis

The 90 employees of the **Division of Environmental Analysis** provide leadership for biological, cultural and community studies, environmental engineering, stormwater compliance and technical support for electronic publishing and geographic information systems. They provide systems and environmental process management for analysis of environmental issues and development of policy. The division was responsible for \$69 million in contracts during the fiscal year, primarily for stormwater technology, pilot projects and hazardous-waste investigations and cleanup.

During the last year, the Environmental Analysis Program prepared 54 environmental documents and completed 659 categorical exemptions and programmatic and categorical exclusions as part of Caltrans' environmental compliance activities.

The division is involved in initiatives to improve cooperation between Caltrans and other agencies—including the Tri-Agency Group (a partnership between the California Resources Agency, the Environmental Protection Agency and the Business, Transportation and Housing Agency)—to improve project delivery while protecting California's environment.

The division began a rotation system to place departmental staff in the State Office of Historic Preservation in order to relieve workload and speed project delivery. It is negotiating with other agencies in the cultural arena to streamline the Section 106 process and to delegate responsibili-

ties to Caltrans. Staff also negotiated an extension of an agreement with the State Office of Historic Preservation that allows Caltrans staff to dismiss recent buildings from Section 106 procedures and distribute guidance on the evaluation of ditches and canals as historic resources.

The Division of Environmental Analysis and the Federal Highway Administration, working jointly, have developed and implemented administrative efficiencies that include:

- Delegation that allows Caltrans to represent FHWA during informal consultation related to federally listed endangered species.
- Standardized reviews for environmental impact statements.
- Standardized formats for environmental documents and technical studies.
- A quality-control program for environmental documents and technical studies.
- Additional legal analysis to address environmental sufficiency in environmental documents.

The Standard Environmental Reference is online on the division's Web site, as are new formats for streamlined environmental documents and studies. A preliminary environmental assessment report has been put into practice to assist in scoping for project initiation.

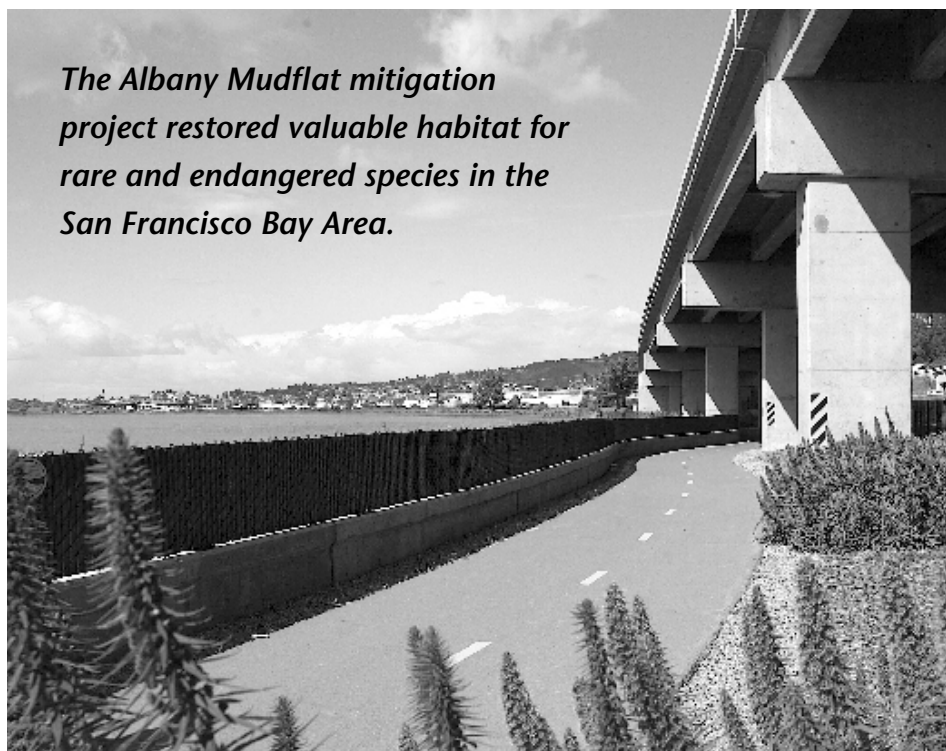
The division executed four biology on-call contracts worth \$12 million, 20 task orders, four of six new hazardous-waste contracts, and new contracts for site investigations and construction emergency services. Staff processed 396

task orders for site investigations and 46 construction emergency-services work requests totaling more than \$460 000. It monitored transportation-related vibration, developed specifications for eight projects and managed more than 50 on-call task orders for traffic noise and vibration studies.

The division developed a methodology for measuring and assessing underwater pile-driving impacts. It has helped Caltrans districts acquire federal and state endangered-species permits and to develop avoidance, mitigation and monitoring measures for attenuating the effects on fish of pile-driving in the San Francisco-Oakland Bay Bridge, Benicia Bridge and San Rafael Bridge projects.

The Caltrans Fish Passage and Watershed Program has developed a draft scope and outlined an engineering manual to reflect acceptable designs and hydraulic performance standards for meeting state and federal guidelines for culverts and corrective actions.

The Albany Mudflat mitigation project restored valuable habitat for rare and endangered species in the San Francisco Bay Area.



Environmental staff coordinated with a number of American Indian groups to develop a statewide tribal transportation conference. In response to the governor's Film California First and STAR initiatives, staff developed conditions for filming in historic buildings. Division staff developed a non-invasive technology for scoping buried archaeological sites and features.

The division developed a database and GIS application for cultural resources that streamlines recordation and allows Caltrans and the State Office of Historic Preservation to track the status of cultural reports.

ental Analysis

Equipment

The Division of Equipment manages the design, purchase, fabrication, maintenance, repair and disposal of the Caltrans mobile equipment fleet. This fleet consists of more than 14 000 units. Even more impressive than the size of the fleet is its complexity. It consists of more than 700 different types of equipment, including snow-removal dump trucks, snow blowers, foundation drill rigs, highway sweepers and electric cars and signs. The fleet is managed and supported by a staff of 738 located in 12 main repair shops and 14 sub-shops throughout the state, including Sacramento.

In 2000, Director Jeff Morales challenged Caltrans to be a good steward of the environment, and to “green” its mobile fleet to reduce pollution. The Division of Equipment responded with the “Greening the Fleet Plan,” a five-year program to reduce emissions through the use of clean-burning fuels, low-emission technologies and solar power.

This year, the department has increased ultra-low sulfur diesel fuel usage to more than three million liters.

This year, the Division of Equipment has increased ultra-low sulfur diesel fuel usage to more than three million liters. This program has received multiple awards, including Director Morales’ first Innovations in Transportation Award.

Director Jeff Morales challenged Caltrans to be a good steward of the environment, and to “green” its mobile fleet to reduce pollution.



In the last half of 2001, the Division of Equipment devised a small-business outreach plan that has recruited an additional 423 certified small businesses, doubling overall participation while closing in quickly on the targeted 25 percent participation. Other achievements include implementing a new, comprehensive, hazardous-waste contract and an aggressive tire-recapping program that emphasizes recycling as a means to reduce the amount of hazardous materials in landfills.

Working closely with the Division of Transportation Programming and Districts 3, 7 and 12, the Division of Equipment has advanced three major capital projects this year: the proposed relocation of division headquarters and manufacturing shop to the former McClellan Air Force Base, creation of a new District 12 main shop in Irvine and relocation of District 7 main shop in North Hollywood.

Unlike most divisions, the Division of Equipment does not receive an annual budget, but is self-sustaining as a rental agency to Caltrans divisions and programs. Rental rates are developed for all pieces of equipment. Vehicle replacement, maintenance and operational overhead costs are funded through rental collection.



The 20-person **Office of External Affairs** carries the Caltrans message to the public and to institutions, agencies, groups and companies such as the California legislature, other state offices, the federal government, the American Association of State Highway and Transportation Officials, interest groups and the news media. The office also communicates internally with other organizational units and the 23 500 Caltrans employees.

This year the office has carried the message of the department's important successes in completing its multi-billion dollar program, and its attention to the maintenance and rehabilitation needs of the highway system, particularly with regard to the governor's Traffic Congestion Relief Program.

The office works to advance the department's policies at both the state and federal level so that Caltrans interests are represented in legislation. It makes recommendations to the governor on pending legislation by preparing legislative analyses and represents Caltrans before the California legislature by testifying before its committees. The legislative liaison staff worked with the governor and the legislature to help shape legislation pertaining to toll bridge seismic-retrofit and replacement funding, highway encroachments, aerially deposited lead, construction cost incentives, rural transit grants and other matters.

The office provides statewide guidance and support for media relations. In the last year it has provided managers and executives of the 12 Caltrans districts with training in handling media inquiries. More than 8000 contacts were made with various media outlets, both by departmental initiative and in response to media inquiries in headquarters or district offices. These efforts were instrumental in the development of columns devoted to transportation matters, which appeared in the state's major media.

With the start of the new fiscal year, the office took over jurisdiction of the department's graphics, film, videotape and photography sections, to provide synergy in the development of collateral materials.

The Office of External Affairs received AASHTO Excel Awards for the 2000-2001 Design Excellence Program. It published 12 issues of the Caltrans News, a monthly

update of departmental happenings, and four issues of the Tort Feasor, to educate Caltrans staff on potential legal issues arising in tort liability. The office also participated in a task force to produce a communications plan for institutionalizing context-sensitive solutions and produced a 2002 calendar to reinforce those principles. It produced six issues of the California Department of Transportation Journal, an insightful compilation of transportation issues and expertise. It also maintains the Caltrans Web site, which received 71.4 million hits this fiscal year.

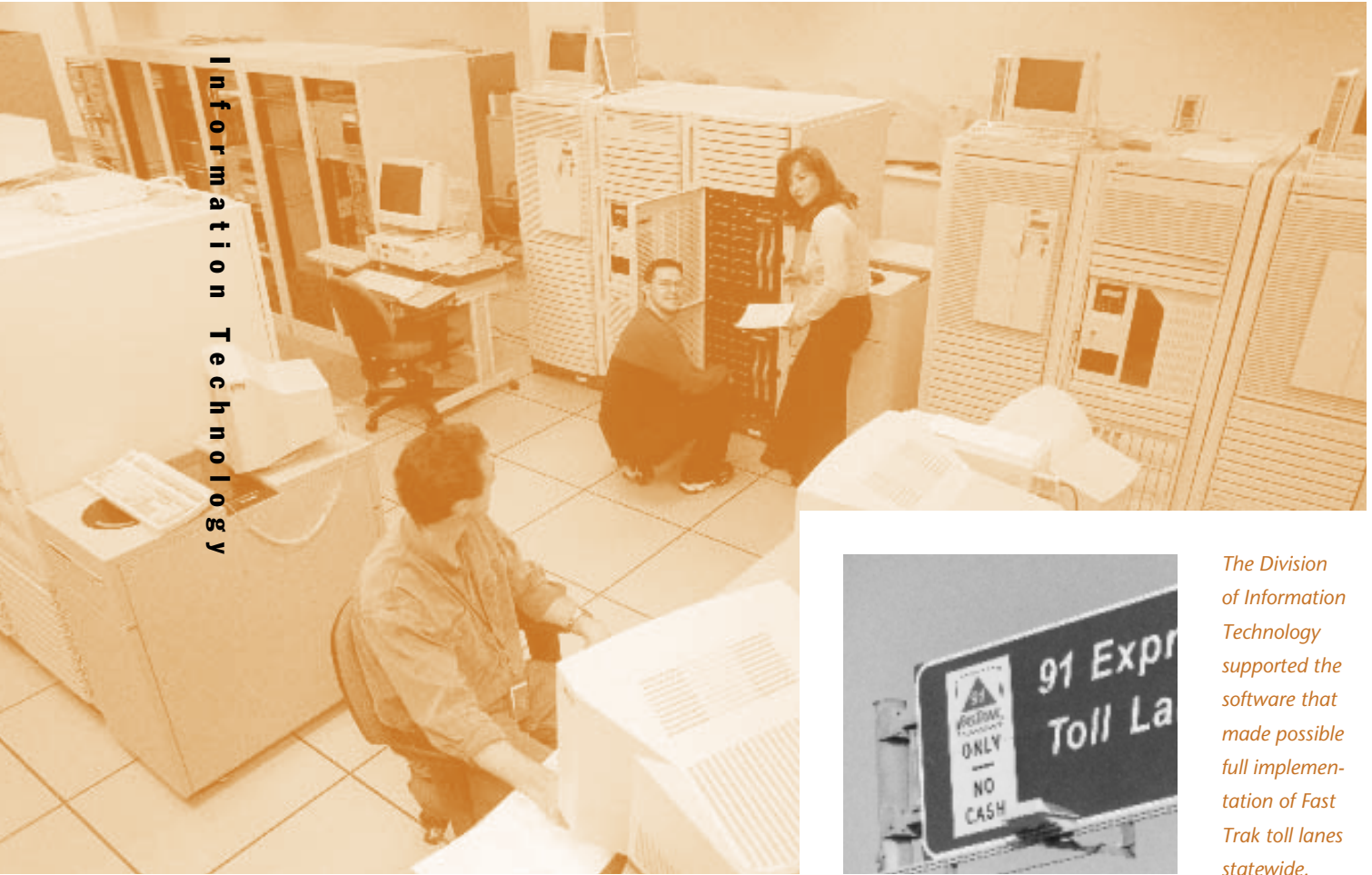
The office continues to produce the award-winning "Slow for the Cone Zone" campaign, which is credited with raising public awareness of worker safety and reducing deaths and injuries in highway work zones.

The office developed the Director's Innovation Awards Program and assisted with the first three awards presentations. It also produces the Caltrans Excellence in Transportation Awards, supplies support for the California Transportation Foundation's annual Tranny Awards and helps other Caltrans divisions in preparation of entries for awards in national competitions.

The Office of External Affairs manages various departmental awards programs; shown below are Wes Lum, Brent Felker and Richards Shepard, Tranny Award winners, with Chief Deputy Director Tony Harris.



Information Technology



The Division of Information Technology supported the software that made possible full implementation of Fast Trak toll lanes statewide.

With a staff of 312 and an \$84 million annual budget, the headquarters' **Division of Information Technology** develops and applies information technology to meet Caltrans business needs, supports the department's information and communications investment and establishes and enforces standards, policies and procedures.

The Program and Project Management Unit performs project initiation and support, strategic planning, risk management and architecture and systems integration. The office, which is undergoing expansion, developed processes for project approvals and management. It also trained more than 300 staff in Caltrans project management methodology and 136 staff in general project management.

The Application Development Office's Finance and Administration Support Unit develops and maintains custom-built applications and off-the-shelf software for the Administration, Accounting, Audits, Budgets and Civil Rights Divisions.

The Oracle Development Office develops and supports traffic operations applications for divisions and offices including System Information, Planning, Programming, Aeronautics, Rail and Mass Transportation. Last year, the unit:

- Converted the current billing and reporting system's bill approvals to a new federal process called Rapid Approval State Payment System, modifying the way the current bill was transmitted to the federal government.

- Implemented, with the Construction and Civil Rights Divisions, a new system to enable vendors to search for disadvantaged-business enterprises on the Internet, streamlining vendor queries.
- Completed installation of electronic toll collection equipment in all lanes of all Bay Area toll bridges in October 2001.
- Received the National Computerworld Honors Program Laureate Award in March 2002 for the integrated maintenance management system.
- Awarded a contract to develop a new transportation permit-management system to Bentley Transportation in January 2002.

The Wide Area Network System Unit installs, configures and manages the network serving Caltrans. The Web support staff, which manages more than 20 servers at headquarters, is integrating video conferencing, desktop video communication and streaming video into the network for routine and emergency communications. The unit has developed methods and standards for use of digital technologies to support telecommuting and access for staff from remote locations.

The Office of Operating System Support provides system and Oracle database administration for Caltrans Unix servers, including CADD servers, Lotus Notes, client-server applications and statewide traffic-management system servers.

The Local Area Networks and Office Automation Support Group provides technical support in desktop and information technology. The unit accomplished:

- A 99 percent or better uptime average last year for the wide area network.
- Development of standards for database and page handling within Caltrans.
- Installation and configuration of direct subscriber line access for multiple road cameras in the districts and in three transportation management centers.
- Installation of new access for security cameras on bridges and transportation management centers.

The Division of Information technology achieved a 99 percent or better up-time average last year for the wide area network.



In March 2002, the Division of Information Technology received the National Computerworld Honors Program Laureate Award for the integrated maintenance management system.

Legal

The Legal Division provides review of cases involving roadside incidents and provides lessons learned to districts in order to forestall future similar incidents.

The Local Assistance Program provides funds for such projects as this bicycle and pedestrian bridge over Interstate 80 in Berkeley.

local assistance

The **Legal Division**, a full-service law office, represents Caltrans and the state in hundreds of lawsuits each year. In addition, the division's staff provides legal advice and assistance for the department's management and staff at headquarters and in the districts.

The division's 290-member staff works in offices in Sacramento, San Francisco, Los Angeles and San Diego; an additional 30 positions are in district claims offices. Tort litigation involving incidents on the state highway system or with Caltrans equipment and vehicles—along with employment law matters (such as discrimination, wrongful termination and employee discipline)—constitute the Legal Division's principal litigation workload. The base budget is \$62 million, with \$38 million of that for tort claims.

The Legal Division has had a successful fiscal year. About 350 tort cases, in which the state was sued for about \$1.1 billion, were resolved. The state won 210 of these cases outright with no payment, as juries reached favorable verdicts or judges granted motions for summary judgment and/or dismissals. The remaining cases resulted in payouts from jury verdicts or settlements totaling about \$62 million (about 6 percent of the amount sought by plaintiffs).

The Legal Division has an aggressive program to help eliminate conditions that give rise to lawsuits. The program includes "lessons learned" communications with the districts, tort liability awareness instruction at training academies and in-house publications highlighting tort liability issues from resolved cases.

In addition to the tort program, the Legal Division provides legal services for the department, many of which are directly related to project delivery. The litigation portion of this work included resolving 42 construction claims arbitrations, 132 eminent domain lawsuits, nine environmental compliance lawsuits, 38 damage to property (inverse condemnation) lawsuits, 76 stop notices actions, 14 unlawful detainer actions and 16 employment law cases.

In addition to its litigation caseload, the division reviewed 1600 contracts and other documents related to various aspects of project delivery, including many for new projects included in the governor's Transportation Congestion Relief Program. The division continued to assist in the review of project development, right of way, environmental clearance, permit and funding documents.

The **Local Assistance Program** supports local agencies in delivering transportation projects funded by federal and state programs. It is comprised of the Division of Local Assistance at headquarters and offices of local assistance in each of the 12 districts. The headquarters division is one of six under the deputy for Planning and Modal Programs.

The Local Assistance Program's capital investment budget—between \$1.1 and \$1.6 billion annually—is made up of federal and state funding that flows through Caltrans to be invested in locally owned streets and roads. The 380 Caltrans employees who facilitate this delivery are funded by a \$31 million operating expense budget.

A team made up of staff from cities, counties, regions and the Federal Highway Administration accomplished major process improvements this year, developing a simple projects guidebook for federal-aid projects to assist local agen-

cies in handling the requirements for simple projects, and to speed processing time. A questionnaire was developed to guide consultants in completing pre-award audits, required on all contracts in excess of \$250 000. Sample work plans identify the major steps in project development to help avoid delays by building an understanding of timeframes, programming, documenting progress in the event of staff changes and completing critical steps on time.

The Local Assistance Program continues to collaborate with the Division of Environmental Analysis in developing a standard environmental reference to enable local agencies to produce consistently superior environmental documents and meet the criteria of review agencies. Volume I, now online, provides guidance for compliance and information about federal and state environmental laws, cultural resources, biological resources, community impacts and stormwater management.

The final phase for the statewide local assistance information system, LP2000, was implemented this year. Use of the system was initially limited to the Local Assistance Program and provided only part of the information planned for entry into the system. The final phase allows districts to maintain information unique to their projects and local customers and to access information critical to their needs.

The Local Assistance Program trained more than 10 000 local agency and Caltrans employees this year in more than 300 course sessions. New courses covered STIP procedures and processes, consultant selection, environmental issues, intelligent transportation systems, goal-setting

methodology for disadvantaged business compliance, bridge inspection and maintenance and highway bridge replacement. The program also presented rehabilitation program workshops.

The Local Assistance Program and the Division of Accounting have jointly developed an electronic funds transfer system to allow local agencies to receive reimbursements electronically in order to speed payment. Also, a Web-based invoice-tracking system is being developed to allow local agencies to view the status of their requests via the Internet.

Maintenance

The **Division of Maintenance**—the second largest division in Caltrans, with an \$824 million budget and 6100 employees—preserves the \$300 billion state highway system and ensures a smooth, safe and aesthetically pleasing ride for motorists.

The division's highest priority is safety. Use of off-duty California Highway Patrol officers has been increased and aggressively promoted to enhance safety in work zones. The division has also instituted an accident-prevention program that includes a safety review team and a safety van project.

The division is developing a portable, truck-mounted barrier to prevent lateral entry into work zones and median barrier projects and maintainable designs that minimize worker exposure. The urban freeway maintenance access program provides pullouts and access to roadsides to reduce worker exposure and closures that impact the public. "Design for safety" features are also being incorporated into highway designs.

This year's "Slow for the Cone Zone" driver education pilot program improved driver awareness of maintenance and construction zones. The division has redirected \$5 million this year to roll out a statewide campaign that includes television and radio spots and other approaches.

The Caltrans maintenance equipment training simulator, which travels to work locations around the state, has so far provided more than 2500 employees with hands-on

practice to reduce accidents, extend equipment life and enhance safety of employees and the public.

The Divisions of Maintenance and Equipment are putting the automated cone placement equipment into use throughout the state. The advanced robotic, computer-controlled equipment places and picks up traffic cones, greatly reducing worker exposure to traffic and repetitive motion injuries.

Preservation of infrastructure assets is the division's second priority. The State Highway Operations and Protection Program coordinator oversees a \$4.08 billion program for safety, mobility and facilities, as well as bridge, roadway and roadside preservation. The 2002 10-year plan request was \$22 billion. Pavement rehabilitation and maintenance reduced the number of kilometers of distressed roadways from 19 785 to 16 610—the lowest since the 1980s. By June, pavement rehabilitation projects totaling \$190 million had been awarded to address 1785 km of distressed pavement. The Division of Maintenance has planned and approved contract awards in excess of \$79 million to improve pavement quality for more than 5670 km of travel way.

The division awarded more than 100 contracts worth more than \$80 million last year, with \$35 million dedicated to preventive maintenance to complete 1150 km of work. Corrective maintenance has been performed on an additional 1930 km of asphalt concrete and Portland cement concrete roadways, at a cost of \$45 million.

Division of Maintenance



The Division of Maintenance oversees the cleanup of hundreds of spills of hazardous materials on California roadways each year, some of them highly toxic.



From July 2002 through June 2006, Caltrans will perform repairs on more than 25 000 km of highway lanes.

The Division of Maintenance reduced herbicide use on state highway roadsides by 50 percent between 1993 and 2000 and established a \$29 million stormwater pollution mitigation program to prevent the pollutants from entering stormwater drainage systems.

The division implemented a program to preserve and repair paint—the first line of defense against corrosion—on steel highway bridges, painting almost 100 000 m² of steel on 43 bridges over two years.

By inspecting more than 6000 bridges and analyzing more than 900 bridges for scour, the division reached compliance with federal regulations, and our 12 656 bridges continue to operate safely. Twelve were mitigated for scour while 105 others were rehabilitated or replaced.

The division has worked closely with other units and the construction industry to develop contract warranty specifications for various surface treatments. Warranties effectively pass the risk of poor performance in materials and workmanship to the contractor. Projects awarded to date have been successful and minimized the exposure of employees to traffic hazards.

Computerworld honored the division's integrated maintenance management information system, now imple-

mented in six districts, for its "visionary use of technology." The system allows the capture of information about work performed and associated costs in order to plan, perform and manage work more effectively.

The Division of Maintenance has partnered with the California Highway Patrol on the State Strategic Committee on Terrorism, instructing more than 6500 personnel regarding suspicious vehicles, packages or individuals near critical infrastructure; undertaking vulnerability assessments and increased security measures at facilities and reviewing and temporarily closing routes to dams, power plants, water treatment facilities and other critical sites.

The division faces a continuing challenge to improve the look of roadsides by removing litter and graffiti and managing vegetation without herbicide use. Regional air and water quality agencies are requiring new technologies and procedures—all to be accomplished without adding to traffic congestion. The job of litter and debris removal at 89 roadside rest areas, 106 vista points and 319 park-and-ride lots requires that we seek alternative labor sources. In addition to the familiar Adopt-A-Highway Program, the Division of Maintenance contracts with the Department of Corrections and local agencies for inmate and court-ordered skilled and unskilled labor.

The division has installed light-emitting diode stoplights at all state-maintained intersections and begun placement of battery backups on high-profile routes—both to reduce power consumption and to ensure that mobility is maintained during blackouts and other emergency situations. The department has instituted a policy of turning off unnecessary lighting, using only what is needed for public and employee safety.

The division upgraded Caltrans' highway information network telephone system to accommodate voice recognition, allowing more than 16.2 million callers to obtain information on highway conditions and incidents.

The **Division of Mass Transportation** funds urban, rural and interregional public transportation—including transit for the elderly and disabled—and provides expertise, training and support to local transit agencies. The program, with 114 positions statewide, has an annual budget of \$9 million.

The division administers funds for rail, transit and ferry projects. This year's projects included the Sacramento Regional Transit District's Southline light rail extension and an express bus project for the Bay Area Rapid Transit district. The division also administers \$2.6 billion as part of the governor's Traffic Congestion Relief Program, whose projects include a bus rapid transit project in Santa Clara

County, purchase of low-emission buses, expanded commuter rail service and new trains and track improvements throughout the state.

The division provided workshops in transit planning and management, local transit project delivery and specialized technology. Under the auspices of the rural transit assistance program, more than 600 local transit personnel participated in transit maintenance and operations workshops. About 120 local agencies also participated in driver training and a 10-day transit management certificate program. The division supports the development of bus rapid transit projects, passenger information systems, smart cards and fuel-cell technology.



The Division of Mass Transportation oversaw the distribution of more than \$1 billion for operating and capital expenditures to transit operators and claimants. It completed the following special projects:

- | | | |
|---|---|--|
| <ul style="list-style-type: none"> • The Agriculture Industry Transportation Services Program, which kicked off services for farmworkers in the San Joaquin Valley. • A reverse commute study to identify gaps and policy options for improving services. | <ul style="list-style-type: none"> • A study of transit-oriented development projects in California. • The first phase of a study to determine ways to attract nontraditional transit riders. | <ul style="list-style-type: none"> • A Federal Transit Administration Section 5311 (rural transit) handbook, with input from local agencies. • The \$18 million state rural transit grant program, with all master agreements. |
|---|---|--|

The Division of Mass Transportation continues to initiate new programs that will make transit a more practical travel option. These include:

- | | | |
|--|--|---|
| <ul style="list-style-type: none"> • A commute-options survey conducted online for Silicon Valley's Manufacturer's Group. | <ul style="list-style-type: none"> • A design-build task force to develop policies and procedures to expedite the delivery of projects. | <ul style="list-style-type: none"> • A proposed car-share proposal to enhance transit usage. • A group-procurement program for diesel and compressed-natural-gas buses. |
|--|--|---|

New Technology

The 142 employees of the **Division of New Technology and Research** assist internal and external customers in using advanced transportation technologies. With a budget of \$74.3 million, the division acts as Caltrans' research and development arm, working with academia, public agencies and private businesses. Among its major accomplishments in the fiscal year was the adoption of the Performance Measurement System (PeMs) as the primary evaluation tool for transportation operation and system improvements made by Caltrans, metropolitan planning organizations and others. The division also:

- Showed that high-volume pours of high-strength concrete can be more effective with the use of cooling tubes to prevent overheating during the curing process. Caltrans used this time-saving technology for the foundations of the new San Francisco-Oakland Bay Bridge.
- Developed and patented a new laser-based, out-of-pavement traffic detector that is many times more accurate than existing detectors at providing incident detection and useful operational data.
- Performed research to develop an easily transportable barrier to shield highway maintenance and construction workers from traffic. A mobile barrier is needed for short-term maintenance and construction jobs, since current barriers are costly and may take a week or more to erect.
- With California Polytechnic State University in San Luis Obispo and the University of California at Irvine, created the Mobile Transportation Management Center to act as a command post at incidents or at construction and special-event sites.
- Developed low-cost ways to use "intelligent transportation systems" in small and rural transit agencies as part of the EDAPTS (Efficient Deployment of Advanced Public Transportation Systems) Caltrans research project. Transit agencies have praised the system, which is now operational.
- Evaluated the introduction of insects as a biological method of controlling noxious non-native plants that have invaded California's roadsides.
- Implemented two landslide mapping units to orient Caltrans geotechnical staff to the latest field data collection and sensor technologies. The PenMap Project demonstrated the ability to accelerate construction and maintenance activities following a landslide.



The Division of New Technology successfully field-tested the automated cone machine to place and retrieve traffic cones, reducing the exposure of Caltrans workers to potential accidents.

- Assisted in improving the quality and timeliness of environmental documents. Examples include verbal pool classification and habitat mitigation techniques acceptable to resource agencies, identification of culverts that block salmon passage, research on methods to control glassy-winged sharpshooters and the initiation of research on impacts to the San Joaquin kit fox and marbled murrelet.
- Continued development of the Vehicle Guidance and Control Project which uses magnetic reference markers embedded in the road, a state-of-the-art inertial navigation system and data from the global positioning system to steer a passenger test vehicle. Elements of this technology now assist snowplow operators to keep vehicles in traffic lanes under low visibility.
- Successfully field-tested the traffic monitoring stations system in District 6. It collects data from roadways to provide transportation management center operators with a simple interface to view real-time traffic data on a map overlay of traffic conditions, including speeds, volumes and occupancies.
- Conducted an international workshop on “deep mixing technology” that led to the development of a pooled-fund study—the National Deep Mixing Program—which promises to lead to innovative construction techniques for difficult ground conditions.
- Won the 2001 American Association of State Highway and Transportation Officials President’s Intermodal Transportation Award for CarLink II, a convenient travel option for commuters.

The **Division of Transportation Programming**, with a staff of 42 and an annual budget of \$3.6 million, manages the programming of transportation projects in two main categories: the State Transportation Improvement Program (STIP) and the State Highway Operation Protection Program (SHOPP). The division is also responsible for administering the federal Statewide Transportation Improvement Program.

Programming, one of Caltrans’ smallest divisions, is a critical link in project delivery. As an interface between Caltrans’ Divisions of Planning, Budgets, Project Development and individual statewide capital programs, the Division of Transportation Programming assembles proposed projects, sets priorities and funding levels and proposes programs for funding by the California Transportation Commission. The division represents Caltrans at all commission meetings and is the department’s liaison.

The 2001–2002 fiscal year brought with it challenges and opportunities. The 2002 State Transportation Improvement Program, encompassing 216 new projects



and 432 previously programmed ones for a total cost of \$7.5 billion, was adopted by the California Transportation Commission in April. The 2002 SHOPP, also approved in April, identified 200 new projects worth \$4 billion.

The 2002 STIP was the first to implement “ITIP Themes” in developing the state portion of the document. These encourage development of a multimodal transportation system that meets interregional as well as regional needs, protects natural resources and preserves quality of life. The themes were used to target and reward regions that made transportation decisions consistent with the state’s policies and goals, with the Caltrans Interregional Transportation Strategic Plan and the Regional Transportation Plans.

Project Management

The Division of **Project Management** coordinates the Caltrans capital program. With a total personal services and operating expense budget of \$18.3 million, the division's 112 statewide staff is entrusted to:

- Deliver projects that satisfy customer needs and increased expectations.
- Improve delivery performance related to quality, scope, cost and time.
- Anticipate and respond to issues before they become problems.
- Effectively communicate with stakeholders.
- Manage project change.

The Division of Project Management oversees transportation projects from start to finish. With an unprecedented \$7 billion in transportation projects under construction, the division has played a strong role in delivering a record number of projects. The division provides the capital outlay support required to deliver projects, develops statewide project management policy and leads in the development of integrated workload development tools and processes. The division allocated \$1.2 billion to other divisions and districts for support of the multi-year capital delivery plan in the fiscal year.

In support of the department's vision to "improve mobility across California," the Division of Project Management

has implemented a statewide project management improvement team, with the primary goals to:

- Develop an integrated project data management system.
- Institute a continuous and adaptable project management training program.
- Use work plans to guide project work.
- Be a recognized leader in project delivery quality.
- Provide a project manager career path.

The division has made great strides toward the implementation of the Project Resourcing and Schedule Management System, which—once in place—will provide scheduling and timesheet capabilities for Caltrans' capital outlay support. This scheduling tool will be used to manage more than 4000 state highway projects and provide resource management for more than 12 000 capital outlay support staffers.

The Division of Project Management is in its third year of implementing the Capital Project Skill Development Office. This office is charged with training the 12 000 capital outlay support staff within Caltrans. It has achieved great success in providing highly technical, just-in-time training to capital outlay staff; it continues to meet its goals of delivering more than 300 specialized courses and 600 000 hours of training to capital outlay staff annually.

With an unprecedented \$7 billion in transportation projects under construction, the division has played a strong role in delivering a record number of projects.

The Division of Project Management formed a statewide project management improvement team to guide changes in the project management process.



Rail



The **Division of Rail** manages and coordinates intercity rail passenger services that contribute to improved air quality and help reduce highway congestion and fuel consumption. More than 3.5 million people used California's state-supported trains in 2001.

The Division of Rail manages two state-supported routes: the San Joaquins (with a total of six round trips from Oakland and Sacramento to Bakersfield) and the Pacific Surfliners (with 11 round trips between San Diego and Los Angeles and four round trips extending north to Santa Barbara, with one additional train to San Luis Obispo). Feeder buses, also run by Amtrak, supplement these routes. In May, a fifth Surfliner weekend train started running between Los Angeles and Santa Barbara/Goleta.

The division provides state funds to the Capitol Corridor Joint Powers Authority, which manages the Capitols (running between San José/Oakland and Sacramento/Auburn). Caltrans assists that service by recommending funding, requesting project programming, procuring rolling stock and managing track and signal projects.

Division of Rail staff performs long-range planning and project management, coordinates with local agencies and manages the capital program for projects on the San Joa-

quin and Pacific Surfliner routes. Track and signal projects provide increased train frequencies, reduce travel times and improve on-time performance.

On the San Joaquin route, a second round trip between Sacramento and Bakersfield, with a new stop at the recently rehabilitated Lodi station, was initiated in March 2002. In the summer of 2001, a new station in Martinez and a new platform in Richmond, featuring a dedicated entrance to the San Francisco Bay Area Rapid Transit station, opened to the public. The Division of Rail is also working with the city of Fresno to renovate its old Santa Fe depot.

On the Pacific Surfliner route, several track and signal projects were completed last year. Multiple new sidings have been constructed in Ventura and Santa Barbara Counties, increasing rail capacity and improving the reliability of trains. The Redondo Junction Flyover Project, completed near downtown Los Angeles in July 2001, has increased the speed and reliability of the Surfliner service by separating the track from the recently completed Alameda Corridor, a major freight rail route. In addition, the division worked with Union Pacific to complete track and signal improvements needed to install centralized traffic control between Moorpark and Goleta. The next phase of this project will provide central control between Goleta and San Luis Obispo.

Track and station improvements and service enhancements supported by the Caltrans Division of Rail have resulted in substantial gains in Amtrak ridership.

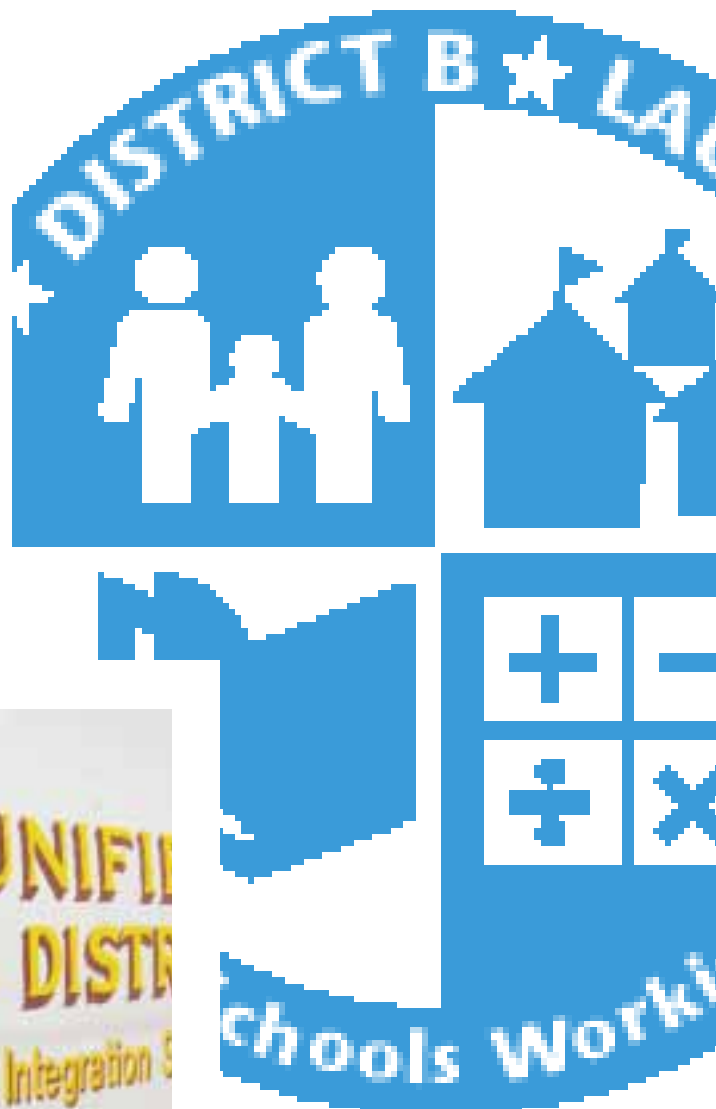
Right of Way



The Right of Way Program realized revenues of \$20 million from leased airspace and wireless communication sites.

The **Right of Way Division**—with 718 headquarters and district employees—acquires, manages and disposes of properties associated with Caltrans' project delivery, and leases airspace and enforces the Outdoor Advertising Act. This fiscal year, staff is projected to acquire approximately 980 parcels, expend \$159 million in capital and manage 4943 properties. This effort realized more than \$13 million in rental revenues and \$15.5 million from selling 400 excess land parcels. In addition, revenues of approximately \$20 million were generated from 550 leased airspace and wireless communication sites.

With the assistance of other divisions, the Right of Way Division worked with the Federal Highway Administration and the U.S. Forest Service on a memorandum of



understanding to identify and perfect land title over hundreds of kilometers of right of way that are undocumented or covered by outdated permits. This will define the rights to these lands and speed delivery of projects in forestlands.

Together with a number of other divisions, the Right of Way Division negotiated an exchange agreement with the Los Angeles Unified School District for the state's equipment repair facility known as Shop 7 in North Hollywood. The district proposed to acquire the property for its new East Valley High School; however, the parties have agreed to an exchange of the Caltrans property for a replacement site, with improvements to be constructed at no cost to the state.

The Right of Way Utilities Branch, in conjunction with the Division of Design, developed a one-day workshop to train project engineers and others on utility relocations. The workshop features interactive videos, PowerPoint presentations and a class binder suitable as a desk reference.

The Right of Way Outdoor Advertising Branch continues to enforce the California Outdoor Advertising Act, managing 11 596 permits and 323 licenses to outdoor advertising businesses, issuing 167 violation notices and removing 224 illegal signs.

Effective in July, the administration of the Right of Way Division's Outdoor Advertising Program was transferred to the Division of Traffic Operations. This transfer will take advantage of the latter's existing field presence, enabling staffers to inspect for compliance with regulations while conducting other duties—such as application processing, inspections, track-

ing, billing and database maintenance—which closely parallel the activities required to manage displays. The department will maintain uniform administration of this program during the transition. The Right of Way Division will assist the Division of Traffic Operations with training and other outdoor advertising activities as necessary to ensure a smooth transition.

Also effective in July, the railroad construction and maintenance agreements and service contracts were transferred from the Division of Engineering Services to the Right of Way Division. Responsibility for project delivery involving railroad contract negotiations will move to a project delivery division chief.

This past fiscal year, the Right of Way Division provided its staff with 22 000 hours of training—including academies, vendor classes and in-house training—at a cost of \$410 000. In August 2001, a one-week planning and management academy was presented for the first time, providing information on a wide range of financial, administrative and managerial duties. A statewide team will develop a two-day version of this presentation for Right of Way Division managers and other staff.

The division implemented the following guidelines and process improvements to speed project delivery:

- Right of way acquisitions prior to environmental clearance.
- Right of way design sequencing.
- State-performed positive location of underground utilities (PosLoc).
- \$25,000 and under single-agent appraise/acquire.
- Improved partnering relationships with local agencies by providing opportunities for local agency staff to attend academy training and allowing adoption of resolutions of necessity at local levels.

Together with a number of other divisions, the Right of Way Division negotiated an exchange agreement with the Los Angeles Unified School District for the state's equipment repair facility known as Shop 7 in North Hollywood.



Freeway service patrols keep traffic moving in the event of a stall or incident.

The Division of **Traffic Operations** has a statewide staff of 1700 employees and a budget of \$145 million. In concert with the Division of Design, the Division of Traffic Operations helps to plan, design, construct, maintain and operate the transportation system in a way that reflects and enhances its surrounding environment while maintaining safe movement for users.

The division plays a key role in identifying and implementing the goals articulated by Director Jeff Morales. Three of these—improving the efficiency of the transportation system, reducing delay due to roadwork and incidents and achieving the best safety record in the nation—relate directly to operations.

During the fiscal year, the division assisted in the award of 127 Major and Minor A safety projects totaling \$125.5 million and successfully achieved toll-free operation of the Coronado Bridge in San Diego before July 1, placing all toll collectors in other jobs in the San Diego area.

Operations awarded a contract to Bentley Transportation and Applied GeoDynamics in the early part of 2002 to implement an electronic permitting system, a matter of high legislative and public interest. The contract is slated for completion in mid-2003.

To improve traffic safety and operations, the division adopted a program for upgrading vertical clearance signing for structures. It also began installing exit numbers on freeways to make it easier for motorists to navigate the freeway system. The division adopted a standard for “left turn yield” extinguishable message signs for use by local agencies and issued a new policy to make it easier for cities to obtain highway signage for civic centers.

Operations delivered the Transportation Management Systems Baseline Inventory to the Department of Finance Technology Investment Review Unit and Department of Information Technology, and received authority to install traffic signals, ramp meters, changeable message signs, etc., on roadway projects without having to submit feasibility study reports to those agencies.



Carpool lanes are speeding travel and saving energy throughout California in urban areas.

The division has deployed 2070 advanced traffic controllers and the CTNET, enabling local agencies to monitor signal status, alarms, counts and volumes from signalized intersections in order to provide transit priority.

The division will complete a transportation management system master plan by the end of 2002. The plan will include a description of processes for managing the system, an assessment of current practices, and definitions of responsibilities of Caltrans and participating agencies with regard to incident management and recurrent congestion.

The division developed and delivered 20 courses and provided more than 70 000 hours of training in traffic operations functions to Caltrans personnel. The division provided training in intergovernmental review and California Environmental Quality Act requirements, showcasing the Guide for the Preparation of Traffic Impact Studies.

The division developed and piloted a traffic safety investigations training program and offered three safety academies.

The **Division of Transportation System Information**, with a work force of 53 employees and an operating expense budget of \$2.4 million, provides data-related service about performance, facilities and fiscal issues pertaining to the state's transportation systems to an array of customers.

This fiscal year, the division's Travel Demand, Microsimulation and Air Quality Modeling group developed an eight-county San Joaquin Valley integrated transportation model. It also prepared guidelines as a basis for a Caltrans and FHWA microsimulation training course.

The Transportation Statistics unit completed the "Truck Kilometers of Travel" report, the 2001 Household Travel Survey, and a Motor Vehicle Travel report. It also completed the first Caltrans Statewide Heavy Duty Truck Travel Survey, to collect representative truck travel data for selected sites in California. The collected data is useful for the identification of relationships between economic activity and truck travel patterns and for analysis of commodity flows.

The Highway Performance Monitoring and System Engineering unit combined state and federally mandated activities to eliminate redundant work effort, updated and streamlined the functional classification of roads and managed contracts for traffic count and pavement roughness data collection. It developed a highway performance monitoring system access query tool, updated the National Highway System and compiled and published the "Named Freeways" and "Named Places" reports.

The Office of Geographic Information System convened a Geographic Information System Management Committee that developed a plan for department-wide implementation of GIS. The unit restructured and expanded a number of data libraries and centralized GIS software licenses on the wide area network, resulting in fewer licenses needed and increased access to GIS software. It developed Web-based GIS, completed spatial registration and distribution of the California Road System map series and distributed the maps to districts and local agencies. It updated and improved functionally classified road system data and scanned historical post-mile maps and posted them to the Web for easy download.

The Office of Performance Measures and Data Analysis integrated performance measures into the State Transportation Plan and aeronautics planning. The unit completed technical memoranda on applicability of performance measures for the SHOPP and Aviation.

The Transportation Statistics unit completed the first statewide heavy duty truck survey to link commodity flows and economic activity.



The Office of Performance Measures and Data Analysis provided performance measures for aeronautics planning.



2, 4, 6, 8... Who Do We Appreciate

Summer days in the Inland Empire can drive the mercury sky-high, but the heat couldn't melt the enthusiasm shared by 900 District 8 employees who participated in their inaugural district-wide employee appreciation luncheon on July 9.

As temperatures climbed to more than 100 degrees, District 8 director Anne Mayer and her 10 deputies (Diana Barich, Garry Cohoe, Dick Doyle, Mitch Hammock, David Mendoza, Ken Nelson, Mike Perovich, Sharon Phillips, George Pink and Khalil Saba) donned aprons and chef's hats in preparation for their duties as food-servers. Caltrans deputy director Tony Harris, who was in the district to present the Value Analysis Award, also chipped in as hundreds of men and women marched through the lunch line en route to plates full of chicken, rice, beans, potato salad, tortillas and salsa.

The lunchtime festivities celebrated a year of accomplishment that began with an opening ceremony for the interchange of the much-anticipated State Route 210 project, which will serve as a new link between Los Angeles County and the Inland Empire. In addition, truck climbing lanes were completed, widening projects initiated, and many traffic congestion relief program projects were implemented throughout the two-county area. District 8 is currently at work on an unprecedented \$678 million in active freeway construction projects, an endeavor that takes the cooperation, dedication and diligence of the entire District 8 team.

"We wanted to take this opportunity to show all the men and women in our district, who work very hard to deliver our product, that their efforts are appreciated," said District 8 Director Anne Mayer.

The celebration enabled the team members of District 8 to interact with each other. Engineers and administrators, office staff and field personnel, management and clerical staff shared stories, insights and laughs during the one-hour gathering.

Maintenance personnel from as far Indio (more than 150 km away) attended the luncheon and were given a tour of the district office—for many of them, their first opportunity to see the facility. "The communications center was the most interesting of all the places we visited," said Jack Vermeule, Indio-area maintenance superintendent. "The communication and interaction among those in attendance greatly enhances our teamwork and our morale."

The event was funded by money raised during an employee-recognition fund drive held last September. Disc Jockey Rick Sepulveda (husband of District 8 employee Joy Sepulveda) donated his time to provide music.

"I'm proud that I work in a district that takes the time to recognize its people," said Darla Matthews, Employee Recognition Committee chairperson and luncheon organizer. "It was an honor for me and the other committee members to help make this event a success."

District 8 got together recently to salute the hard work of its staff after a year of accomplishment.





A Caltrans Hero

The lonely and sometimes mundane routine of early-morning winter patrol in a snowplow became a harrowing experience for longtime California Department of Transportation equipment operator Frank “Butch” Chapman.

For 11 years, Chapman has worked the roads of California for Caltrans—most recently at the Alturas maintenance station in Modoc County for District 2—but never had he experienced an incident like this one.

Nearing the end of his very early shift and heading back to the warmth of the maintenance station, he slowly made his way along State Road 299 near Rattlesnake Creek outside of Alturas. The usual calm and quiet routine operation of the plow was interrupted by the sight of smoke escaping from the eaves of a family home.

Adrenaline pumping and thoughts of being ready to go home quickly vanishing, he pounded on the front door and awakened the home’s occupants, who hadn’t known that anything was amiss since the smoke and carbon monoxide detectors hadn’t sounded any alarms.

After making sure the family was safe, Chapman fought the flames with the fire extinguisher from the snowplow. As the group waited for the Alturas fire department to arrive, Chapman helped the Vogel family move as many belongings as they could from the house. They managed to save some family photos and the baby’s bassinet.

In August Chapman was awarded the Governor’s Safety Award for his heroism by the Department of Transportation. A highlight for him was having his wife, Debra, and their 12-year-old son, Garrett, with him when he received the award.

Butch Chapman accepts the Governor’s Safety Award for heroism, shown at the capitol with Caltrans Director Jeff Morales.



Chapman also received special recognition for his heroism during the Break for Excellence Awards ceremony held in January in District 2. Acting district director Brian Crane, a former high school classmate of Chapman’s, commended him for his unselfish act of bravery, and for being an employee we can all be proud to work with.

The Vogel family and the Alturas Fire Department credit Chapman with saving the family’s lives that snowy morning. The fire was extinguished, but re-erupted several hours later and completely destroyed the home. “I just felt tired and ready to go home,” he said. A well-deserved fishing trip should be his next big adventure! —Denise Yergenson, District 2 Information Officer



Caltrans' Own Waldo Pepper

Most days, Kurt Haukohl, an aviation safety officer with the Division of Aeronautics, heads to various airports and heliports to do safety inspections. He usually flies in a Beechcraft Bonanza with a big blue and green "CT" on the side.

But about seven or eight times a year, this former investment banker with the Vero Group in Texas climbs into the BlackEagle 540 muscle biplane that he built himself, and he takes to the skies in aerobatic competitions. Most recently he earned a first and third place in two categories in a competition in British Columbia.

Haukohl—flying a racy, home-built, yellow, black and white biplane that generates enough thrust to allow it to hover while pointed straight up in the sky—performs stalls, tailslides, humpies, hammerheads, figure eights, snaps and Cuban eights, all within a cube that's 100 meters off the ground and measures 1000 meters on all sides.

"The object is precision," Haukohl says. "You're trying for accuracy of lines, angles and placement of the figures. Your presentation, rhythm and style over the balance of the flight as a whole are what counts."

A typical competition for Haukohl involves a compulsory precision sequence of maneuvers, followed by a freestyle sequence that the pilots design and prepare themselves to illustrate their mastery of the aircraft. "Sometimes," Haukohl says, "we are given an unknown sequence for which we haven't prepared; everyone has to do the same figures in the same order. That's what separates the winners from the losers. What it boils down to is experience."

Haukohl started flying solo in Miami, Florida, when he was 16 years old, and began doing aerobatics by the time he was 17. He's been at it more than 30 years. "I like it because it's a true three-dimensional sport," he says. "It requires versatility and an ability to think quickly. It teaches



you to master an airplane in the truest sense. The competitions are fun because everyone's there to see who's the best pilot. There may be equipment differences, but at the end of the day, we learn who's the best pilot regardless of the equipment. And interestingly, you can be old. Aerobatic pilots peak in their mid-40s, because their bodies function better under 'g-stress' than those of younger, aerobically fit people."

Haukohl has a strong interest in designing, building and flying aircraft. About 10 years ago, he built his BlackEagle 540, at a cost of about \$150 000.

Haukohl says he's working for the Division of Aeronautics because he's "just the kind of guy who loves airports. I'd be hanging out at them anyway if I didn't work for Caltrans. I like airport space and airport structures, so the job is a natural."

In his job, Haukohl hangs out at a lot of airports. He's responsible for safety inspections and training at about 130 airports and heliports in Southern California, including San Diego and LAX. —Gene Berthelsen

Kurt Haukohl, an aviation safety officer in the Division of Aeronautics, competes in aerobatic competitions when not inspecting California's airports.



people

The Mad Dashers

Late in 2001, a group of District 12 armchair athletes, tired of lonely workouts, TV sports and, most dreaded of all, dieting, decided to do something about it.

They started a running club.

"We had to think of a name that would fit a group of middle-aged 'admin' and engineering types who liked to run and maybe do some other adventurous things," says Albert Miranda, who founded the club along with Enrique "Hank" Alonso, Jon Rohrer and Mike Varipapa. "When we mentioned the idea to our friends and family the immediate response was that we were crazy or even mad for liking to run in the first place. And like most Caltrans employees, we had busy schedules and were always dashing from one meeting to the next."

Two words kept creeping back into the mix: "mad" and "dashers." And so the club name was born; they would be the "Mad Dashers Running Club." The next challenge was the logo. One of the team's early goals was to track how many miles they had run.

They decided to set a mileage goal. One member stated that he would like to run the equivalent of once around the world before he died. So an image took shape, of the Earth with a little Rastaman running around the edge of the globe, and the tagline, "It's only 24 830 miles. I Want to Run Around the Earth Once Before I Die."

The founding members have lost a collective 50 kg of weight and have an average body fat lower than 16 percent. The Dashers have now entered 22 races, including the California off-road marathon relay, in which



District 12's mad dashers are running to keep fit, the better to do their Caltrans jobs.

they entered two four-person teams in the mixed-teams category, and finished with very respectable fourth and seventh places. The club has now competed in several 5K, 10K, half- and full-marathons and triathlons. Several members are planning to compete in an extreme adventure race soon.

"Two lines of inspiration keep us going," Miranda says. 'Pain is only weakness leaving the body,' and 'What doesn't kill you will only make you stronger.' We may be mad but we are having fun at it."

After starting with four members, the club has now grown to 13, including some spouses. "We challenge the Caltrans couch-potatoes and armchair athletes to get off their duffs and traverse the roadways, trails and waterways that make up the best transportation system in the world," Miranda says.

Making a Difference

Sacramento High School has recognized Division of Equipment employee Virgil Realin for his outstanding contributions to its automotive repair Regional Occupational Program during the 2002 spring semester. Virgil's recognition earned Caltrans' Adopt-A-School Program a nomination for the School-to-Career Honor Roll Award.

The Adopt-A-School Program exposes students to career opportunities and provides students and educators with resources to ensure academic and workplace success. Virgil played a vital role in adopting Sacramento High School in February 2002. He developed nine instructional sessions and put together a team of Division of Equipment employees who delivered hands-on instruction, classroom presentations and a departmental tour at the headquarters equipment shop.

In the fall of 2001, when Virgil was asked to spearhead the Division of Equipment's Adopt-A-School Program, he viewed it as an opportunity for Caltrans to make a difference. "It's difficult to recruit for trade-skill positions," Virgil says. "My goal was to impress the students at Sacramento High and get them to come knocking on our door."

When Virgil was a high school student, one of his most memorable experiences was a tour of the old General Motors assembly plant in Fremont. "It made such a lasting impression that I knew I wanted to repair or build equipment," he says. In his second year of college, he began at Caltrans as a mechanic's helper. After completing the apprenticeship program, Virgil climbed the career ladder in the Division of Equipment. He has been with Caltrans for 24 years and is now in the position of Highway Equipment Superintendent I.

Virgil's plan did make a difference. Virgil said he got "chills" when he received a phone call from the mother

of a student who told him her son had just come home and showed her what he'd made in school that day. He'd told her that a Caltrans instructor had taught the students how to weld. Virgil says, "It's only one parent, but that's all I needed. Hey, the program is working, and that's what we're there for."

The School-to-Career Honor Roll Awards luncheon, sponsored by Sacramento County, the Sacramento Metropolitan Chamber of Commerce and Channel 10 News, was held June 26. Realin, along with the Adopt-A-School staff and volunteers, attended the ceremony and met the state's first lady, Sharon Davis. Mrs. Davis acknowledged the Caltrans Adopt-A-School Program in her remarks.

Virgil gives special credit to the Adopt-A-School volunteers from the Division of Equipment who helped make this effort possible: Bob Steinbrecher, Mike McNealy, Rob Stearns, Howard Larson, Kent Dove, Paul Hodel, Ray Stewart, Roger Hilburn, Steve Peña, Terrence Edlund, Bill Schmitt, Miguel Anglada and Glenn Breckenridge.

"None of this would have been possible without the support my managers, Rick Sheasby, Kris Teague and Paul Hodel, and the Adopt-A-School Program, administered by the Division of Human Resources." The program will continue its commitment to Sacramento High School next year.

Highway Equipment Supervisor I Virgil Realin has made a difference in Sacramento with his work on the Adopt-A-School program.





people

District 10 Walks the Walk

District 10 recently joined the ranks of nearly 3 million Americans who participated in the 2002 March of Dimes Walkathon. This year's 10K walk was the culmination of an annual campaign to raise awareness of the need for funding to assist premature babies.

It was also great fun.

"When we heard of this organization's mission and understood the need, we were compelled to organize a District 10 team," says Julie Dunning, the district's deputy director of administration.

On the morning of the walk, it was evident that Julie wasn't the only one touched by the March of Dimes message; District 10's team totaled 60 members. "Our orange T-shirts could be seen for miles!" Julie bubbles. The team

developed a unique T-shirt design and competed in a group T-shirt contest with a slogan, "Caltrans and March Of Dimes...What a Pair! Walkathon 2002," and a logo showing a pair of jeans. Team members decorated their dungarees to reflect their individual personalities. Themes included Marilyn Monroe and Hawaiian and western motifs. The creativity paid off; the Caltrans team won first place.

Participants were treated to a continental breakfast and a high-energy aerobic warm-up led by Lynn Hogue, March of Dimes coordinator, and Jaylene Hess from District 10's mailroom. And to keep walkers motivated and hydrated, plenty of water was served along the route, along with mini muffins and gummy worms.

The fun didn't end when the walking was over. Face painting, clowns and a local radio station broadcast added to the festivities. And local firefighters expressed their support and appreciation to the volunteers by sponsoring a hot dog barbecue.

Although this was the district's first year to participate in the Walkathon, which raised \$6000, it certainly will not be the last. The need for specialized care for premature babies continues, and from what it accomplished this year, you can expect that District 10 will be up to the task.

—Stacy Dukes, District 10 Public Information Officer



Orange shirts were the mode-o-day at the recent March of Dimes Walkathon in Stockton.

walk!



A Home for Humanity

A needy family in the city of Shasta Lake will sleep a lot more comfortably soon, thanks to the thoughtfulness of two Caltrans staffers.

Steve Elkins and Eric Chaffee are doing construction contract oversight on a project to upgrade the interchange of Interstate 5 and State Route 87 just south of the city of Mount Shasta. One day, Elkins and Chaffee noticed that about 100 sheets of 4 x 8 5/8 inch plywood, which had been used for bridge forms and were thinly coated with hardened concrete on one side, were probably going to the county dump.

"The material was rough on one side, but still should have been good for something," Elkins says. "Some of the sheets got damaged during stripping, but these were okay. We couldn't sell it and the contractor didn't want it. Maintenance had no use for it, but Eric and I couldn't help thinking it'd be a shame to throw it away."

So the two of them started looking around to find different places that might need it. Between them, they came up with the idea of contracting Darrell Burrell, the manager of Habitat for Humanity in Redding.

"We were extremely happy to get the material," Burrell says. "It's just great. We were planning to start a home in Shasta Lake in August. We can make use of the material to form the foundation and a retaining wall. Also, it should work well as roof sheeting, since only one side of the plywood has to be smooth. And there should be enough for the rather high pony-wall—about three meters at the end of the house, on a sloping lot. And there's enough for the wall framing below the floor level. Not only that, a number of large beams were saved as well. It'll save a lot of material costs."

Generosity is contagious. The contractor, Hutchins Paving and Engineering of Redding, transported it to Habitat for Humanity, free of charge.

The home, four bedrooms and two baths, to be built with all-volunteer labor, will house the family of seven of a



Redding YMCA janitor, whose annual income is less than \$20 000. Construction of the home is expected to take about "six months, if we're lucky," Burrell says. "Eight months, if not."

"In most cases," Burrell says, "building materials are purchased with funds from businesses, churches and individuals. Where we can use material such as this, we will do so."

To qualify for a Habitat for Humanity home, families must have an income that is below 50 percent of the median income in the surrounding area. The new homeowners will have to put in 500 hours of "sweat equity" if they can. If they can't do homebuilding work, they can work on other projects.

"The idea is to get them into a house they can own, rather than being a perpetual renter. Habitat for Humanity sells the homes at cost—about 50 percent of the cost on the market. Buyers pay the mortgage cost directly to Habitat for Humanity. We do not charge interest on the loan."

And thanks to a couple of thoughtful Caltrans guys, that cost will be substantially less than it might have been.

—Gene Berthelsen

Steve Elkins and Eric Chaffee, doing construction oversight on an Interstate 5 interchange, saw a way to make things easier for a needy family.



Anna at Allison Elementary

It takes only one person, one idea and the motivation to turn thought into action, to create a positive connection between Caltrans and a community.

Anna Reinold had an idea.

Anna, a student assistant in the Division of Business, Facilities, Asset Management and Security in Sacramento, is enrolled in the teaching-credential program at California State University Sacramento. As a teaching assistant for a second-grade classroom at Allison Elementary School in North Highlands, she was concerned with her students' learning environment.

"We came to class one morning to find all the windows in the classroom had been broken overnight," Anna said. "I was shocked to learn this had not been the first time. It is not uncommon to find broken beer bottles littering the playground. Vandalism is a constant problem."



One person—Anna Reinold—one idea and caring people have turned into the start of something big at Allison Elementary School.

Wanting to reward the children for doing well in school despite the many challenges, Anna and her Caltrans family organized a pie-throwing booth at the annual divisional barbecue to raise money for new books. One dollar bought a pie-plate heaped with whipped cream—and a manager as a target. Who could resist? As it turned out, not many could. The \$200 raised that day was used to purchase 26 new books for the Allison students.

Working with environmental and transportation themes, Anna selected books like "On the Go" (about different modes of transportation around the world), "Building a Road," and "Dear Children of the Earth" (which discusses the connection and value of all ecosystems on our planet).

Steve Alston, the division chief, visited the classroom with Anna for the presentation of the books and read one of them, "So You Want to Be President," to the students.

"The teacher, Jan Nielson, had tears in her eyes," Anna says. "In her 30 years of teaching, no one from the community had done anything like this for one of her classes."

Students were amazed that people they didn't know cared that much about them, and they enjoyed the pictures of the pie-throwing event. The thank-you letters the kids sent reflected the connection that has been made.

"I like you because you teach people stuff," wrote Litia.

Ta'Jon looked ahead to other possible visits: "Will you and your Caltrans people come play basketball with me?"

What about the future? The division would like to maintain contact with this particular class and follow its progress. Anna is paving the way to making this happen. —Jan Webb, Associate Caltrans Administrator



Helping the Homeless at the Holidays

She's putting together holiday gift packs right now, but Claudia Gumbaro, a biologist in District 10, doesn't have to wait for the end-of-year holidays to spread good cheer to those in her community who are less fortunate than others. She keeps busy 12 months a year collecting toiletries and assembling hygiene packets to give to residents of a homeless shelter in Stockton.

"I collect hotel goodies—shampoo, conditioner, lotion, soap, etc.—and put sets of them together in a zipper-lock plastic bag with a new wash cloth and a new comb. I keep a basket on my desk so that the Environmental folks here in District 10 can unload any hotel goodies cluttering their drawers at home," said Gumbaro, who has worked for Caltrans since February 2001. She drops off the packets at the shelter periodically throughout the year.

"Last fall was my first delivery to the shelter," she said. She put together 57 hygiene packs in that effort. She's working on supplies for her next delivery: "I'm in search of a good deal on combs."

Gumbaro got the idea from a co-worker at a previous job in Chico. "She used to bring hotel goodies to the office for needy clients. It wasn't until I moved to Stockton and began working at Caltrans that I had the need to stay in hotels with any sort of regularity. From my first hotel stay, I began collecting the goodies. I then began to ask my co-workers here in District 10 Environmental if they would be willing to add to the collection. That's how I got enough for my first delivery last fall."

Then she threw her net a little wider. When she attended two week-long Caltrans events—such as a cultural re-

District 10 biologist Claudia Gumbaro collects hotel toiletries and provides them for the needy.



source functional meeting in Lake Arrowhead and the Environmental Planner Academy—a co-worker announced that Gumbaro would accept unused hotel toiletries. "And did I get a good response! At both events, I collected bags of goodies. You should have seen all the goodies I carried back on the plane from the Lake Arrowhead meeting. I had to have my supervisor and co-workers help me stuff all these things into my luggage," she said.

"We are so fortunate to have our great jobs and to have the opportunity to travel for conferences and training. Sharing the little soaps and whatnots from our trips is such a small and effortless thing to do. I encourage others to do so in their communities, and I welcome anyone from any other district who comes to the Stockton district office to bring their goodies and drop them in my basket," said Gumbaro, who

is also a wish granter for the Make-A-Wish Foundation and a tutor for the county library Adult Literacy Program in Stockton. —Jane Sellers, District 6 Research Writer

"Sharing the little soaps and whatnots from our trips is such a small and effortless thing to do. I encourage others to do so in their communities, and I welcome anyone from any other district who comes to the Stockton district office to bring their goodies and drop them in my basket."



people

Life Is for the Birds

Many people are fond of saying that life is for the birds, but Mariana Mejia, a veteran personnel analyst in headquarters, has stretched that concept to its logical conclusion. Mejia, a bird-owner for 20 years, has been breeding and raising birds for 10 years, and now owns about 90 feathered friends.

Mejia got into the bird business in a big way after her pet cockatiel escaped and her husband, for consolation, bought her a rare Patagonian conure, a dark olive-green bird with a bright yellow body and red abdomen, that nests in hillsides when in the wild. That got her interested in exotic birds, and today she owns 17 cockatiels, 25 parrots, several doves and parakeets and about 50 finches. Mejia adopted many of these birds from others who were unable to care for them.

"I have a separate bird room in which many of the birds live," Mejia says. "But the big pet birds live in the living room with me. They're really like my family. One likes to sit on top of my recliner to watch television with me. Another likes to rest with its head under my chin. They say good night when my husband and I go to bed, or

goodbye when we leave for work. When someone knocks on the door, they ask who it is, even fooling the UPS man one time into believing that the lady of the house was in but too frightened to come to the door."

"As you can imagine," Mejia says, "that many birds can get awfully noisy. The parrots have gotten so they tell the others to quiet down. And I have one that calls me a 'bad bird' when I run the vacuum cleaner."

Mejia feeds her birds about 45 kg of birdseed each month and puts about 15 hours a week into their care and feeding. Lately she has started exhibiting her birds at bird shows and has taken back-to-back Golden Bear Trophies for having the Best Bird in Show at the California State Fair.

There are problems with that many birds, Mejia says. "I have a macaw that likes to chew. In fact her name is 'Chewey.' She has chewed up a 20 dollar bill. She's a great junk-mail shredder. Nothing is spared. The birds especially like to chew on door moldings."

She credits her birds with helping her to learn patience and educating her on the need to preserve the environment for birds. She is now raising two pairs of endangered cockatoos, representatives of a species that is disappearing in the wild for lack of habitat. There are now more of these birds in captivity than in the wild, she says. "I've learned a lot about genetics through breeding them for various characteristics, and I've met a lot of interesting people through the bird societies I belong to."

Does she ever get away? As a matter of fact, Mejia and husband Don have just returned from a two-week vacation in Montana. Bird-owning friends took care of Mejia's pets while she was gone. —Gene Berthelsen

Personnel analyst Mariana Mejia has gone from bird ownership to preservation of rare species through her hobby.





Editor's Notebook

Naming Names

Drive the crosstown freeway in Stockton, and you'll see signs that identify it as the "Ort Loftus Freeway."

Who in the heck is—or was—Ort Loftus, and why is the freeway named after him?

Loftus owned a radio station and downtown property in Stockton and was a tireless proponent of the highway that now links State Route 99 and Interstate 5. When the freeway opened, Loftus held a banquet at which he served "giant turkey legs" as an insult to then-director Adrianna Gianturco, whom he held responsible for the time it took to get the highway up and running. (She wasn't. The problem was money.)

But the fading memory of Ort Loftus, and the hundreds of other dignitaries with their names on road signs, brings up the question of how highways get their names. Ronald Packard, Linus Claeys, Henry Edgar Beck, Dallas C. Bache and Elmer Hurlbutt all lend their names to California roadways, sending motorists on down the road scratching their heads about who they were.

Highways are named as a result of legislative resolutions which usually involve a lot of digging around for support, after which they are passed on some dark night. Resolutions aren't signed by the governor, are not laws and don't require action by Caltrans, but we treat them as law: getting signs made up at the proponents' expense and planting them in the ground where we're asked to.

Some highways get a lot of attention. Route 80 has been named, at various places, for James B. Rolf, Gary L. Hughes, Kent D. Pursel, Roy P. Blecher, W. Michael Freeman, Alan S. Hart, Abraham Lincoln and Dwight D. Eisenhower. You know about Lincoln and Eisenhower. Rolf was a California governor. Hart was district engineer of District 4 from 1964 to 1970. Pursel was a Berkeley city councilman. Gary L. Hughes, Blecher and Freeman were

California Highway Patrolmen killed while on duty.

There's an interesting legislative fuss going on right now as Congressman Gary Miller tries to build support to name a section of State Route 90 as the Richard Nixon Parkway. Route 90 was named after the president in 1971 when he held office, but the name was stricken in 1976 after he resigned in disgrace. Caltrans ceded a portion of the route back to the city of Yorba Linda a couple years ago, so things will be a bit complicated if Nixon presides over a state route and a local street.



Interstate 5 between Sacramento and Stockton is named for former Caltrans Chief Engineer Carl Forbes.

Enoch Christoffersen, Harold W. Comfort, George C. Cole, Frank F. Moymer and Viggo "Vic" Meedom—they're all there in the "2001 Report of Named Freeways, Highways, Structures and Other Appurtenances in California." Their names—but not their pasts—are impressed indelibly on us. It gives support to a notion of my buddy, Jim Drago: maybe there ought to be a sunset law for these names. Reconsider them every ten years. If nobody remembers who they were by then, let them pass quietly into history.

Department of Transportation Organization Chart

